

COMPUTEX 2019



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**DeLOCK**

 **NAVILOCK**

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## COMPUTEX 2019

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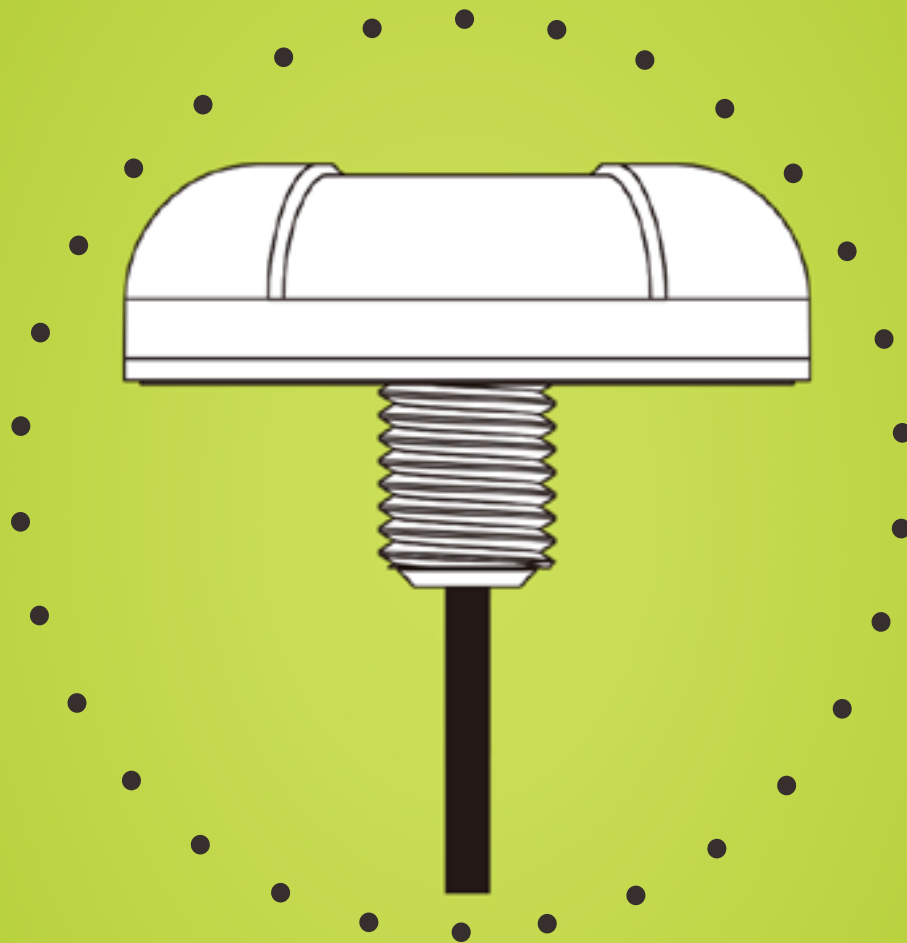
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**GPS**

[www.navilock.de](http://www.navilock.de)

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# Serial GNSS Receiver M8 MediaTek MT3333

Receiver with M8 waterproof connector (for optional connecting cables)  
MediaTek MT3333 receiver accepts the signals of up to 33 satellites at the same time

GPS  
L1  
1575.4200  
MHz

GLONASS  
L1  
1602 (k x 0.5625)  
MHz

**black**

**0.5 m**



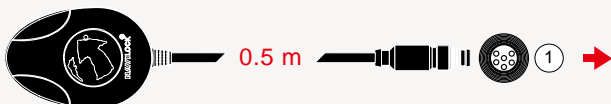
**MEDIATEK**

**MT3333**



CE FC

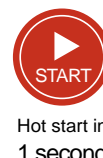
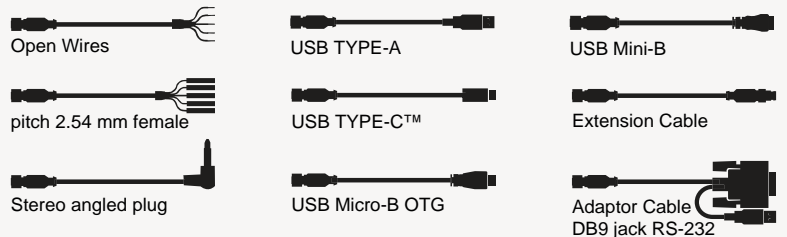
## Mult interfaces



LxWxH: ca.65 x 45 x 22 mm

① M8 Navilock waterproof connection plug

## Optional connecting cable





# Serial GNSS Receiver M8 MediaTek MT3333

Receiver with M8 waterproof connector (for optional connecting cables)

MediaTek MT3333 receiver accepts the signals of up to 33 satellites at the same time

Roof mounting and waterproof housing (IPX7)

GPS  
L1  
1575.4200  
MHz

GLONASS  
L1  
1602 (k x 0.5625)  
MHz

**black**

**0.5 m**



**MEDIA TEK**

**MT3333**



CE FC

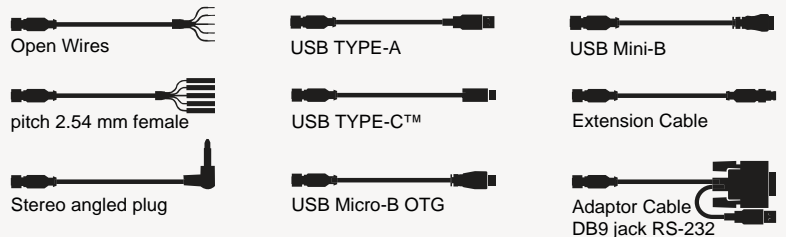
## Mult interfaces



Ø x H: ca. 62 mm x 21 mm

① M8 Navilock waterproof connection plug

## Optional connecting cable



# Serial GNSS Receiver M8 MediaTek MT3333

Receiver with M8 waterproof connector (for optional connecting cables)

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GPS  
L1  
1575.4200  
MHz

GLONASS  
L1  
1602 (k x 0.5625)  
MHz

white

0.5 m



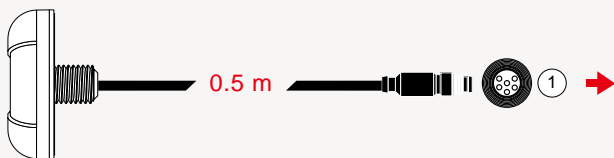
MEDIATEK

MT3333



CE FC

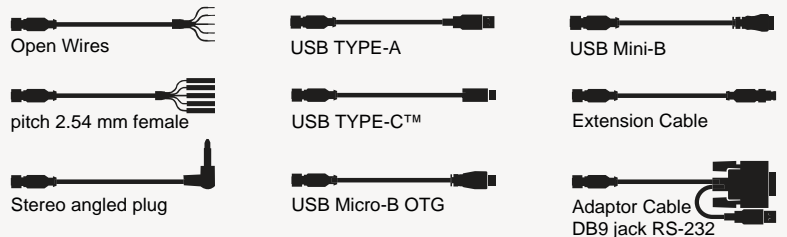
## Mult interfaces



Ø x H: ca. 62 mm x 21 mm

① M8 Navilock waterproof connection plug

## Optional connecting cable



# MD6 Serial Multi GNSS UDR Receiver u-blox NEO-M8U

**black**

**5 m**

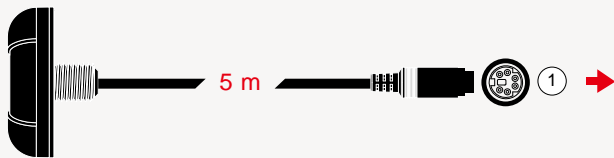


- GPS  
L1  
1575.4200 MHz
- GLONASS  
L1  
1602 (k x 0.5625) MHz
- BEIDOU  
B1  
1561.0980 MHz
- GALILEO  
E1  
1575.4200 MHz
- QZSS  
L1  
1575.4200 MHz

CE FC



## Mult interfaces



Ø x H: ca. 62 mm x 21 mm

① MD6 Navilock plug

## Optional connecting cable

- Open Wires
- pitch 2.54 mm female
- Stereo angled plug
- USB TYPE-A
- USB TYPE-C™
- USB Micro-B OTG
- USB Mini-B
- Adaptor Cable RJ11 / RJ45
- Adaptor Cable DB9 jack RS-232

**Windows**  
Vista/7/8.1/10

**Linux**  
Kernel 2.6

**Auto Baud**  
Rate up to 115200 bps

**UPDATE**  
rate up to 20 Hz

**Sensitivity max**  
-160 dBm

**START**  
Cold start in 26 second

**START**  
Hot start in 1 second

**Protection class**  
IPX7

# MD6 Serial Multi GNSS UDR Receiver u-blox NEO-M8U

**white**  
**5 m**

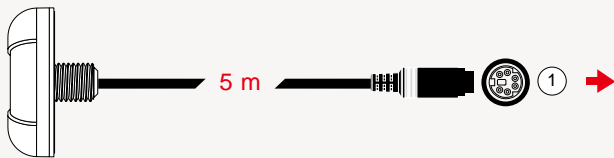


- GPS  
L1  
1575.4200 MHz
- GLONASS  
L1  
1602 (k x 0.5625) MHz
- BEIDOU  
B1  
1561.0980 MHz
- GALILEO  
E1  
1575.4200 MHz
- QZSS  
L1  
1575.4200 MHz

CE FC



## Mult interfaces



Ø x H: ca. 62 mm x 21 mm

① MD6 Navilock plug

## Optional connecting cable

- Open Wires
- pitch 2.54 mm female
- Stereo angled plug
- USB TYPE-A
- USB TYPE-C™
- USB Micro-B OTG
- USB Mini-B
- Adaptor Cable RJ11 / RJ45
- Adaptor Cable DB9 jack RS-232

**Windows**  
Vista/7/8.1/10

**Linux**  
Kernel 2.6

**Auto Baud**  
Rate up to 115200 bps

**UPDATE**  
rate up to 20 Hz

**Sensitivity max**  
-160 dBm

**START**  
Cold start in 26 second

**START**  
Hot start in 1 second

**Protection class**  
IPX7

# MD6 Serial Multi GNSS UDR Receiver u-blox NEO-M8U

**white**  
**0.6 m**



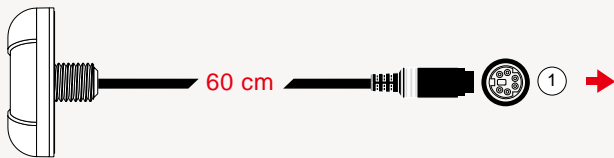
**u-blox 8**

- GPS**  
L1  
1575.4200 MHz
- GLONASS**  
L1  
1602 (k x 0.5625) MHz
- BEIDOU**  
B1  
1561.0980 MHz
- GALILEO**  
E1  
1575.4200 MHz
- QZSS**  
L1  
1575.4200 MHz

CE FC



## Mult interfaces



Ø x H: ca. 62 mm x 21 mm

① MD6 Navilock plug

## Optional connecting cable

- Open Wires
- pitch 2.54 mm female
- Stereo angled plug
- USB TYPE-A
- USB TYPE-C™
- USB Micro-B OTG
- USB Mini-B
- Adaptor Cable RJ11 / RJ45
- Adaptor Cable DB9 jack RS-232

**Windows**  
Vista/7/8.1/10

**Linux**  
Kernel 2.6

**Auto Baud**  
Rate up to  
115200 bps

**UPDATE**  
rate up to  
20 Hz

**Sensibility max**  
-160 dBm

**START**  
Cold start in  
26 second

**START**  
Hot start in  
1 second

**Protection class**  
IPX7

# USB 2.0 Multi GNSS UDR Receiver u-blox NEO-M8U

UDR Receiver with high-sensitivity sensors such as a 3D accelerometer and a 3D gyroscope

**black**



**u-blox 8**

- GPS  
L1  
1575.4200 MHz
- GLONASS  
L1  
1602 (k x 0.5625) MHz
- BEIDOU  
B1  
1561.0980 MHz
- GALILEO  
E1  
1575.4200 MHz
- QZSS  
L1  
1575.4200 MHz

62756 | 1.5 m  
62758 | 4.5 m

CE FC



LxWxH: ca.65 x 45 x 22 mm

① USB 2.0 Type-A male

  
**Windows**  
Vista/7/8.1/10


  
**Linux**  
Kernel 2.6

  
Auto Baud  
Rate up to  
115200 bps

  
UPDATE  
rate up to  
20 Hz

  
Sensitivity max  
-160 dBm

  
START  
Cold start in  
26 second

  
START  
Hot start in  
1 second

  
Protection class  
IPX6



# USB 2.0 Multi GNSS UDR Receiver u-blox NEO-M8U

**black**

**4.5 m**



<b>GPS</b> L1 1575.4200 MHz
<b>GLONASS</b> L1 1602 (k x 0.5625) MHz
<b>BEIDOU</b> B1 1561.0980 MHz
<b>GALILEO</b> E1 1575.4200 MHz
<b>QZSS</b> L1 1575.4200 MHz

**u-blox 8**

CE FC



Ø x H: ca. 62 mm x 21 mm

① USB 2.0 Type-A male

**Windows**  
Vista/7/8.1/10

**Linux**  
Kernel 2.6

Auto Baud  
Rate up to  
115200 bps

UPDATE  
rate up to  
20 Hz

Sensibility max  
-160 dBm

START  
Cold start in  
26 second

START  
Hot start in  
1 second

Protection class  
IPX7

# USB 2.0 Multi GNSS UDR Receiver u-blox NEO-M8U

**white**  
**4.5 m**



<b>GPS</b>	L1 1575.4200 MHz
<b>GLONASS</b>	L1 1602 (k x 0.5625) MHz
<b>BEIDOU</b>	B1 1561.0980 MHz
<b>GALILEO</b>	E1 1575.4200 MHz
<b>QZSS</b>	L1 1575.4200 MHz

CE FC



Ø x H: ca. 62 mm x 21 mm

① USB 2.0 Type-A male

**Windows**  
Vista/7/8.1/10

**Linux**  
Kernel 2.6

**Auto Baud**  
Rate up to  
115200 bps

**UPDATE**  
rate up to  
20 Hz

**Sensibility max**  
-160 dBm

**START**  
Cold start in  
26 second

**START**  
Hot start in  
1 second

**Protection class**  
IPX7



# Micro USB 2.0 OTG Multi GNSS UDR Receiver u-blox NEO-M8U

**black**

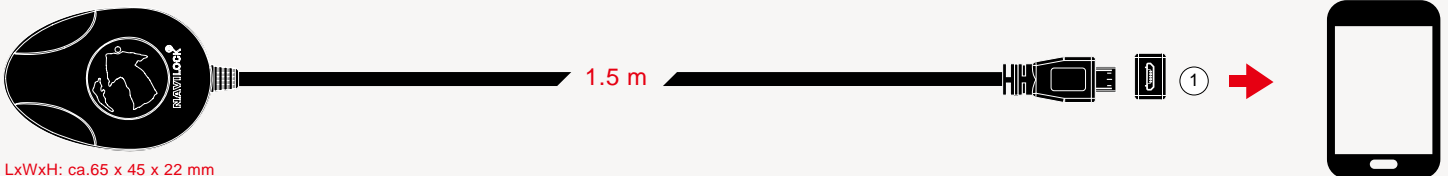
**1.5 m**



**u-blox 8**

- GPS**  
L1  
1575.4200 MHz
- GLONASS**  
L1  
1602 (k x 0.5625) MHz
- BEIDOU**  
B1  
1561.0980 MHz
- GALILEO**  
E1  
1575.4200 MHz
- QZSS**  
L1  
1575.4200 MHz

CE FC



LxWxH: ca.65 x 45 x 22 mm

① USB 2.0 Type Micro-B OTG male

**Windows**  
Vista/7/8.1/10

**Linux**  
Kernel 2.6

**Auto Baud**  
Rate up to  
115200 bps

**UPDATE**  
rate up to  
20 Hz

**Sensibility max**  
-160 dBm

**START**  
Cold start in  
26 second

**START**  
Hot start in  
1 second

**Protection class**  
IPX6

# RS-232 GNSS Receiver with M8

waterproof connector



## Multi-interfaces

GNSS Galileo Glonass GPS / MT3333 Serial M8 PPS 50 cm



60325 mouse black



60326 roof mount black



60327 roof mount white

## GNSS Connection Cable

### M8 LVTTTL (3.3 V) series converter

- 62939 pitch 2.54 mm female 5x
- 62938 Open Wires
- 62937 3.5 mm 4 pin
- 62936 3.5 mm 3 pin
- 62935 2.5 mm 4 pin
- 62933 2.5 mm 3 pin

### M8 TTL (5V) series converter

- 62891 pitch 2.54 mm female 5x
- 62892 Open Wires
- 62887 3.5 mm 4 pin
- 62894 3.5 mm 3 pin
- 62888 2.5 mm 4 pin
- 62893 2.5 mm 3 pin

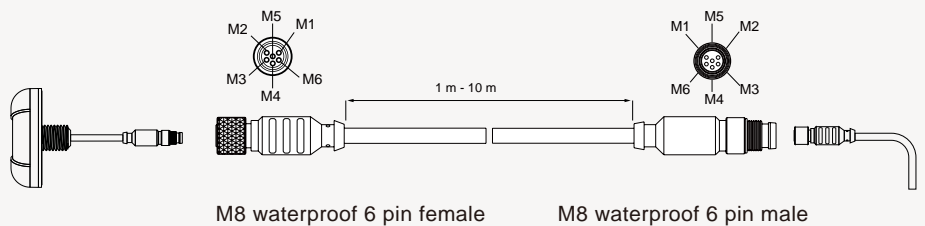
### M8 USB series converter

- 62970 USB Type-A
- 62940 USB TYPE-C™
- 62941 USB Micro-B OTG
- 62943 USB Mini-B

## GNSS Extension Cable

### M8 plug > jack

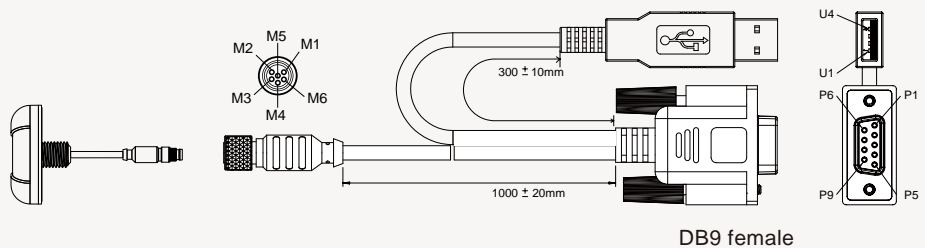
- 62971 1 m
- 62972 2 m
- 62973 3 m
- 62974 5 m
- 62975 10 m



## GNSS Adapter Cable

### M8 serial RS-232 DB9 jack

62875



# RS-232 GNSS Receiver with MD6

## Multi-interfaces

GNSS Galileo Glonass GPS / NEO-M8U Serial MD6 PPS 50 cm









62665 roof mount black








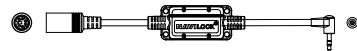
62755 roof mount white

## GNSS Connection Cable





### MD6 LVTTL (3.3 V) series converter

-  62929 pitch 2.54 mm female 5x
-  62928 Open Wires
-  62926 3.5 mm 4 pin
-  62925 3.5 mm 3 pin
-  62924 2.5 mm 4 pin
-  62923 2.5 mm 3 pin

### MD6 TTL (5V) series converter

-  62883 pitch 2.54 mm female 5x
-  62884 Open Wires
-  62880 3.5 mm 4 pin
-  62885 3.5 mm 3 pin
-  62881 2.5 mm 4 pin
-  62886 2.5 mm 3 pin

### MD6 USB series converter

-  61264 USB Type-A
-  62879 USB TYPE-C™
-  62877 USB Micro-B OTG
-  62878 USB Mini-B

## GNSS Adapter Cable

### MD6 RJ11



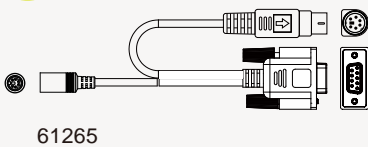
### MD6 RJ45



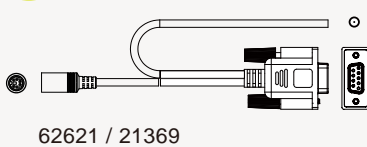
### MD6 Micro Fit 3.0 4P plug



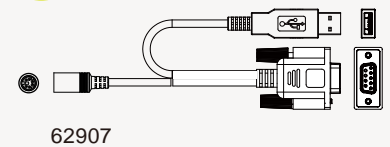
### MD6 serial RS-232 DB9 jack



### MD6 serial PPS DB9 jack



### MD6 serial RS-232 DB9 jack



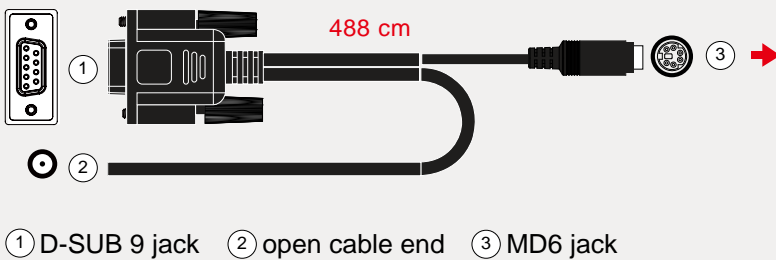
# Connecting Cable MD6 Serial > D-SUB 9 Serial for GNSS Receiver with PPS

The pin assignment of this connector is identical with chipsets by u-blox and SiRF

**488 cm**

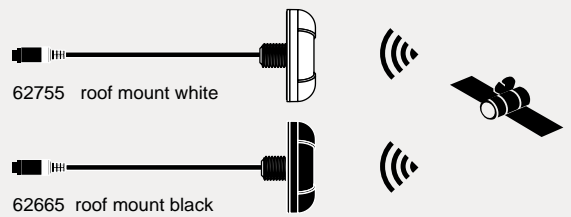


CE FC



① D-SUB 9 jack    ② open cable end    ③ MD6 jack

## Navilock GNSS Receiver



Power supply via open cable end  
red: +5 V black: GND



Length:  
ca. 488cm



for  
GNSS receiver

# NL-82052TTL Multi GNSS UDR u-blox NEO-M8U PPS engine module

Supports AssistNow online/offline, SBAS (WAAS, EGNOS, QZSS and MSAS)

Supports NMEA 0183 protocols: GGA, GSA, GSV, RMC, VTG

Supports UDR from NMEA 4.1

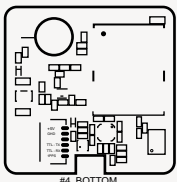
GPS  
L1  
1575.4200  
MHz

GLONASS  
L1  
1602.5625 -  
1615.5000  
MHz

BEIDOU  
B1  
1561.0980  
MHz

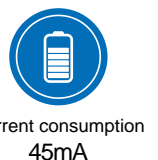
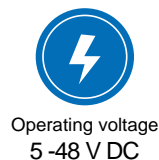
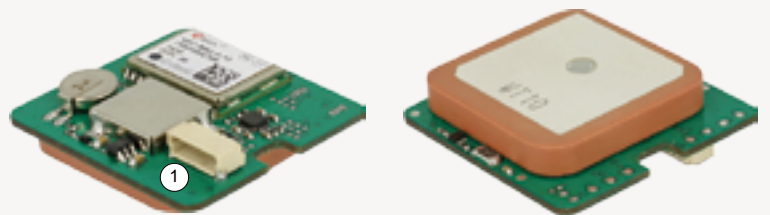
GALILEO  
E1  
1575.4200  
MHz

QZSS  
L1  
1575.4200  
MHz



LxWxH: ca. 30 x 30 x 7.90 mm

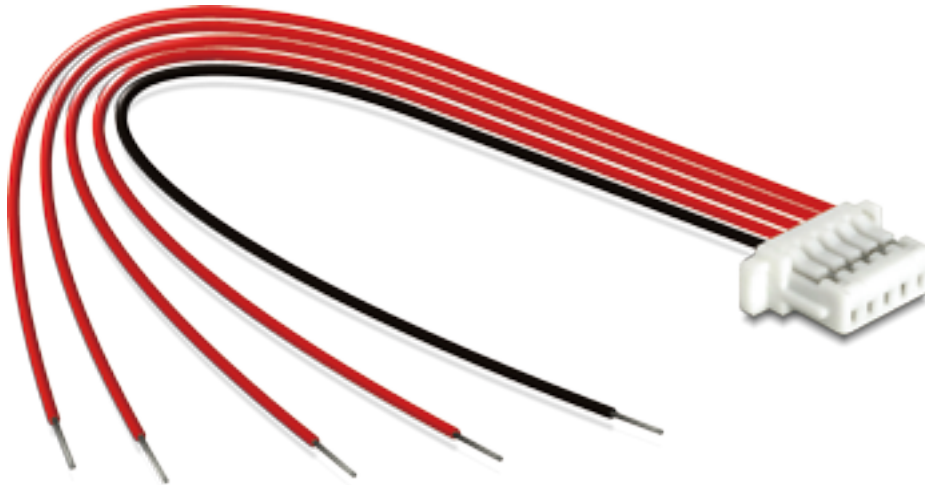
① Connector: 1 x WTB serial TTL



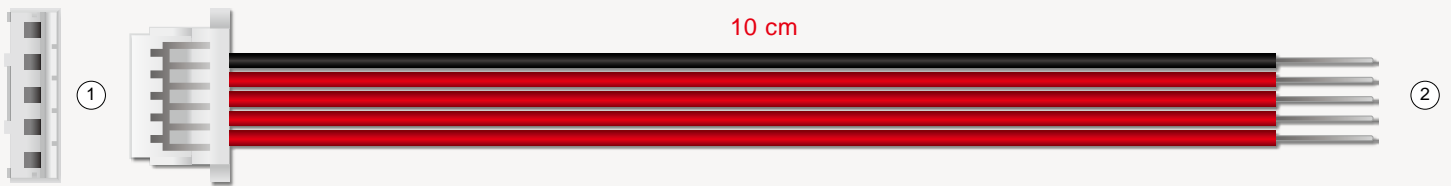
# Connecting Cable 5 pin for module

The cable must be in your application are USB 2.0 compliant shielded and twisted!

**10 cm**



CE FC



① 5 pin female > ② open cable wires



Manufacturer of connector  
ACES 87214 – 0500

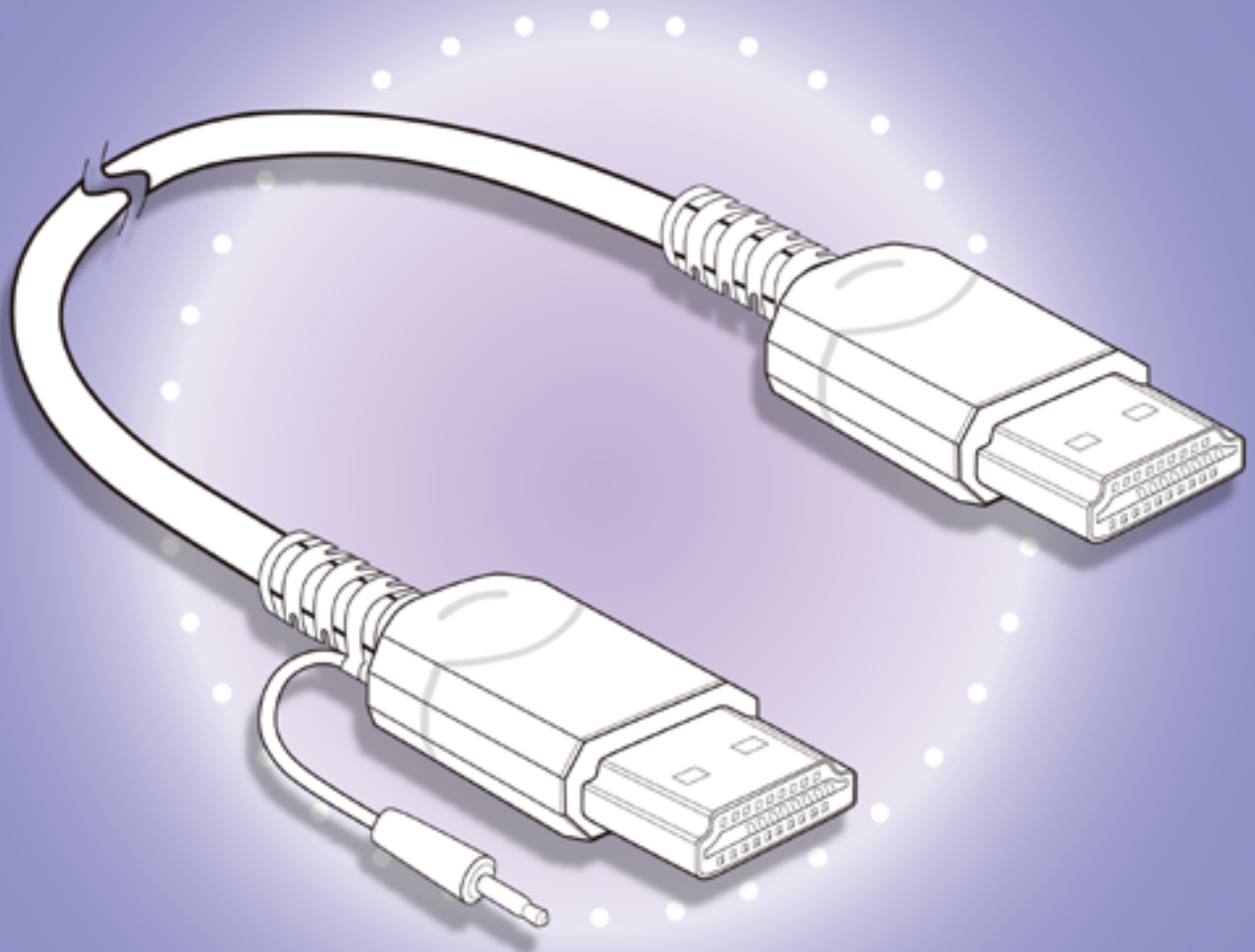


Length:  
ca. 10 cm



WTB wire to  
board connector





# Active Optical Cable

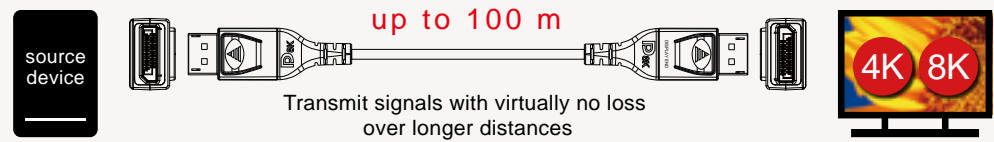
[www.delock.de](http://www.delock.de)

# Active Optical Cable

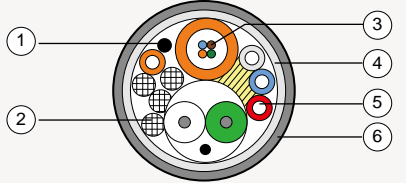
## DisplayPort 1.4 male > DisplayPort 1.4 male

Supports DSC, Forward Error Correction, HDR  
 Audio Support Up to 1536 kHz audio sampling rate  
 DP 1.4 HBR3 (32.4 Gbps)









- EMI protection**
- 4K @120Hz**
- 8K @60Hz**
- DSC / HDR**
- 100 M**



Construction:



- ① Drain wire
- ② Filler / Aramid yarn
- ③ Optical fiber
- ④ Separator
- ⑤ Copper wire
- ⑥ Jacket

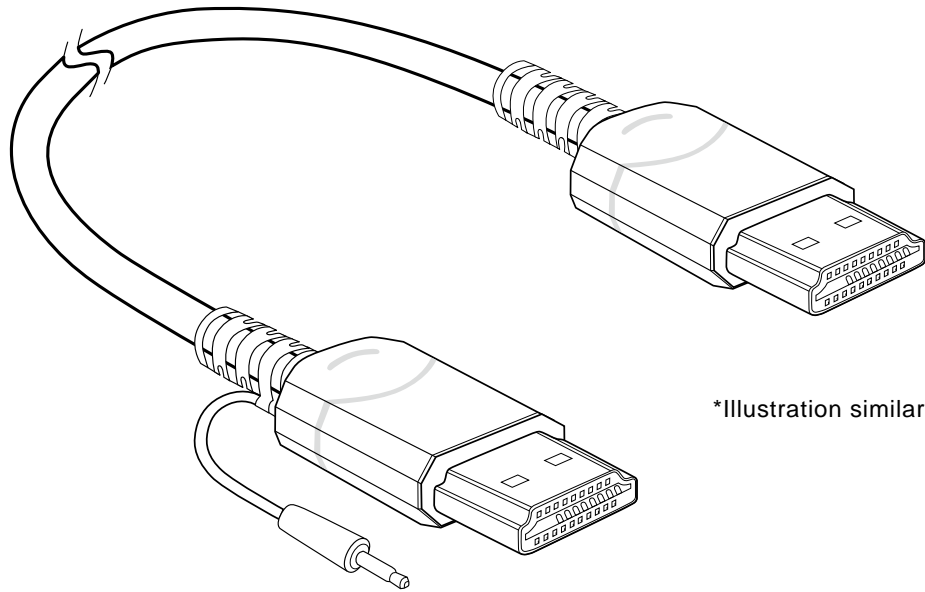
-   
 Bending Radius  
8 mm
-   
 data transfer  
Cable Direction
-   
 Pulling Force  
12 kg
-   
 ESD  
8KV
-   
 Salt mist test  
48 hrs
-   
 Humidity  
0% - 95 % RH
-   
 Op. Temp.  
0°C - 80°C
-   
 Drop test  
2 meters



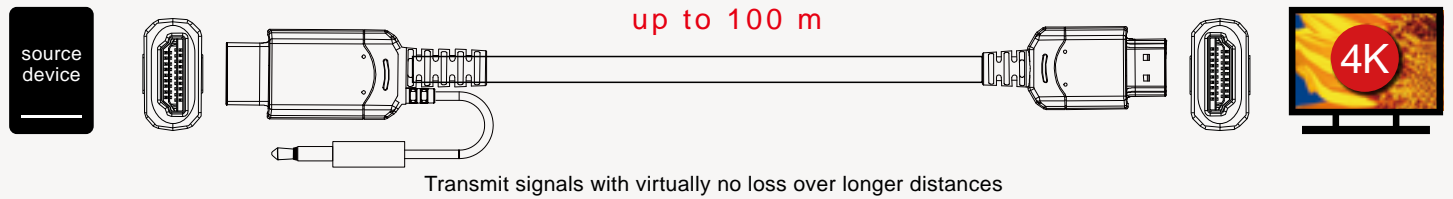
# Active Optical Cable HDMI 2.0 male > HDMI 2.0 male with an external power









HDMI 1.4 (10.2 Gbps) & 2.0 (18Gbps)  
18 Gbps connection for 4K 60fps 4:4:4 HDR applications

- EMI protection**
- 4K @60Hz**
- 3D / HDR**
- 100 M**



\*Illustration similar



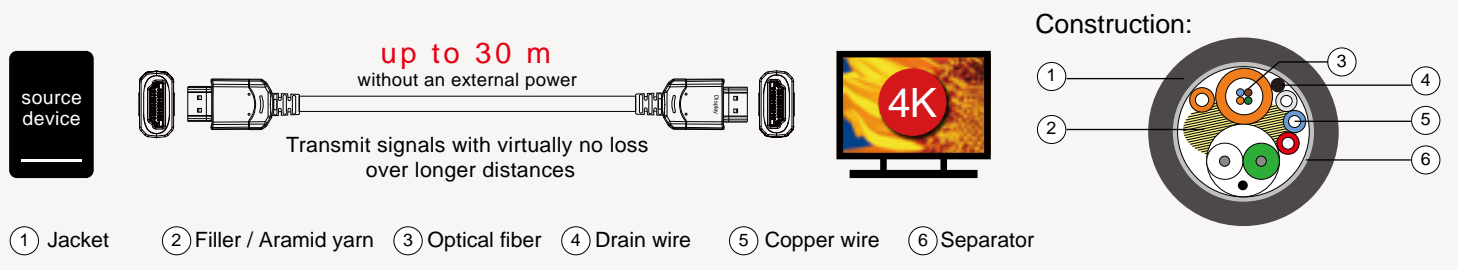
-   
 Bending Radius  
8 mm
-   
 data transfer  
Cable Direction
-   
 Pulling Force  
12 kg
-   
 ESD  
8KV
-   
 Salt mist test  
48 hrs
-   
 Humidity  
0% - 85% RH
-   
 Op. Temp.  
0°C - 50°C
-   
 Drop test  
2 meters









# Active Optical Cable

## HDMI 2.0 male > HDMI 2.0 male

HDMI 1.4 (10.2 Gbps) & 2.0 (18 Gbps)  
 18 Gbps connection for 4K 60fps 4:4:4 HDR applications  
 No external power needed  
 Short plug fixture

- EMI protection**
- 4K @60Hz**
- 3D / HDR**
- 30 M**



-   
 Bending Radius  
8 mm
-   
 data transfer  
Cable Direction
-   
 Pulling Force  
12 kg
-   
 ESD  
8KV
-   
 Salt mist test  
48 hrs
-   
 Humidity  
0% - 85% RH
-   
 Op. Temp.  
0°C - 50°C
-   
 Drop test  
2 meters

# Ultra Slim Active Optical Cable

## HDMI 2.0 male > HDMI 2.0 male

HDMI 1.4 (10.2 Gbps) & 2.0 (18 Gbps)

18 Gbps connection for 4K 60fps 4:4:4 HDR applications

No external power needed

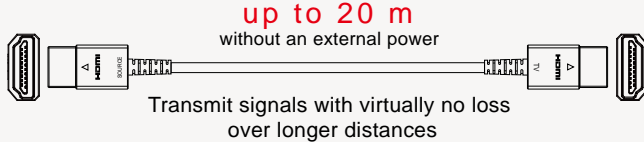
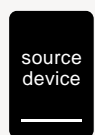
**EMI protection**

**4K @60Hz**

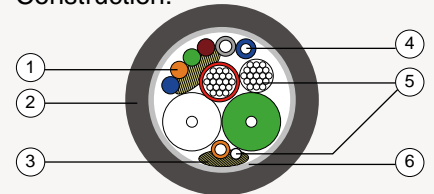
**3D / HDR**

**Ultra Slim**

**20 M**



Construction:



- ① Optical fiber
- ② Jacket
- ③ Filler / Aramid yarn
- ④ Copper wire
- ⑤ Drain wire
- ⑥ Separator



Bending Radius  
25 mm



data transfer  
Cable Direction



Pulling Force  
12 kg



ESD  
8KV



Salt mist test  
48 hrs



Humidity  
0% - 85% RH



Op. Temp.  
0°C - 50°C



Drop test  
2 meters

# USB 3.1 Gen 2 Type-C™ male > DisplayPort 1.4 male

Supports DSC, Forward Error Correction, HDR10  
 Audio Support Up to 1536 kHz audio sampling rate  
 DP 1.4 HBR3 (32.4 Gbps)

**EMI protection**

**4K @120Hz**

**8K @60Hz**

**DSC / HDR10**

**Bidirection**

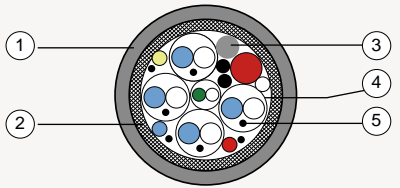
**1.5 M**



CE FC



Construction:



- ① Jacket
- ② Braiding
- ③ Filler
- ④ Aramid yarn
- ⑤ Drain

Bending Radius  
32AWG 9mm

Pulling Force  
12 kg

Salt mist test  
48 hrs

Humidity  
0% - 95% RH

Op. Temp.  
0°C - 80°C

Drop test  
2 meters

data transfer  
bi-directional

# DisplayPort 1.4 male > DisplayPort 1.4 male

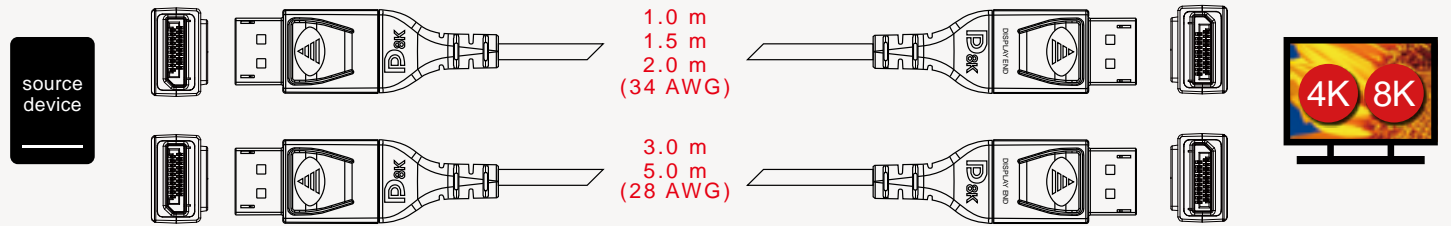
Supporting a maximum bandwidth of 32.4 Gb/s  
 Audio Support Up to 1536 kHz audio sampling rate  
 DP 1.4 HBR3 (32.4 Gbps)

**EMI protection**

**4K @120Hz**

**8K @60Hz**

**Bidirection**



  
 Bending Radius  
 32AWG 9mm


  
 Pulling Force  
 12 kg

  
 Salt mist test  
 48 hrs

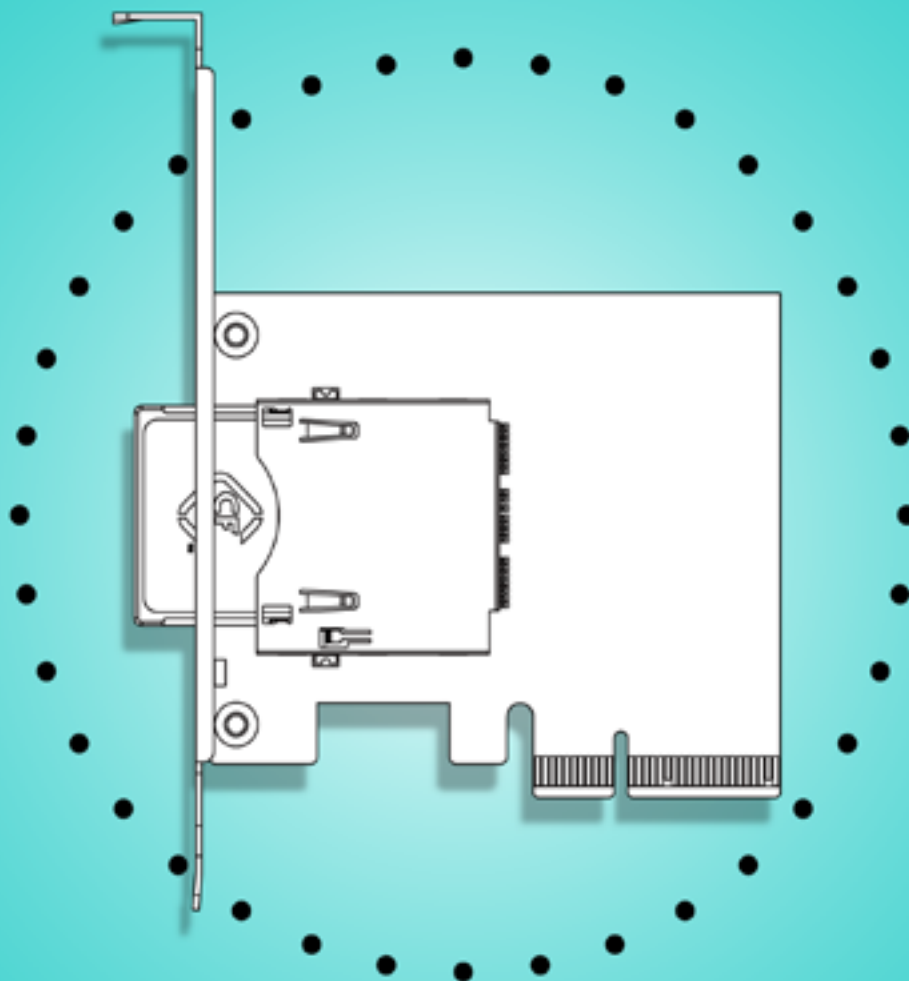
  
 Humidity  
 0% - 95% RH

  
 Op. Temp.  
 0°C - 80°C

  
 Drop test  
 2 meters

  
 data transfer  
 bi-directional

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we move the world



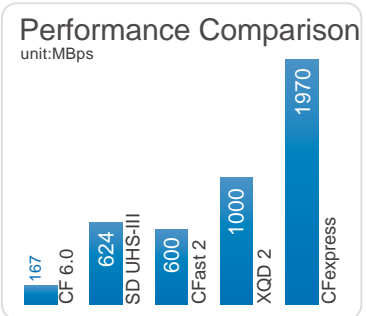
**CFexpress**  
[www.delock.de](http://www.delock.de)

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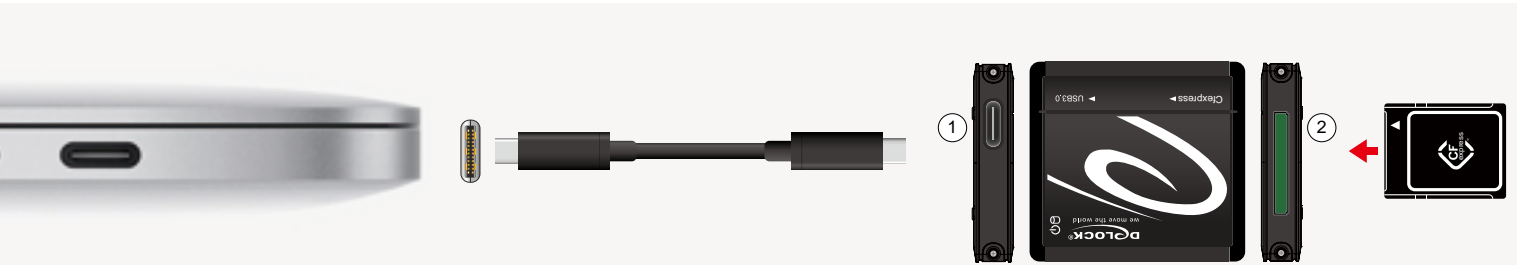
# USB 3.1 Gen 2 Type-C™ > CFexpress Type-B

To read and write CFexpress NVMe SSD cards  
Support NVMe communication agreement  
No driver installation required

- 1 x CFexpress slot**
- USB Type-C**
- black**



CE FC



① 1 x USB 3.1 Gen2 Type C female    ② 1 x CFexpress Type B slot

LxWxH: ca. 67 x 60 x 14 mm / 2.64 x 2.36 x 0.55 inch  
Weight: 50 g / 0.94 oz

- Windows**  
7/7-64/8.1/8.1-64  
10/10-64
- Mac OS**  
ex 10.x
- Linux**  
ex Kernel 4.6
- DATA**  
transfer rate up to  
10 Gb/s
- LED indicator for  
power & access
- Housing material  
aluminum
- Hot Swap  
Plug & Play
- push & push



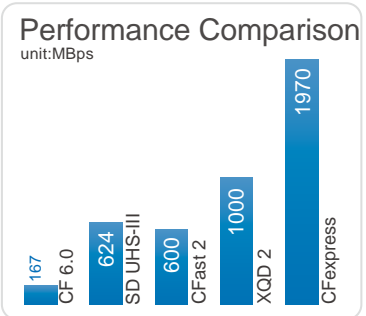
# M.2 (PCIe) > CFexpress

Expand your computer with an additional CFexpress Card through M.2 PCIe M key or B key interface

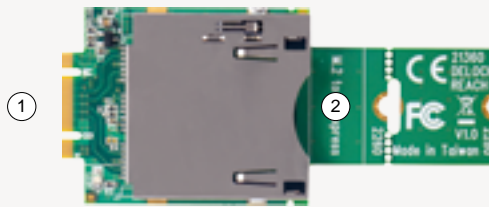
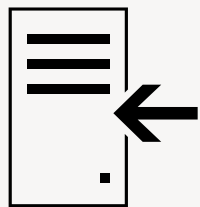
No driver installation required

Supports CFexpress 1.0 Card

**1 x CFexpress slot**

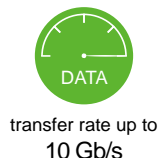


CE FC



① M.2 PCIe key B + M ② CFexpress slot

LxWxH: 80.0 x 37 x 5 mm / 3.15 x 1.46 x 0.197 inch  
Weight: 15 g / 0.28 oz

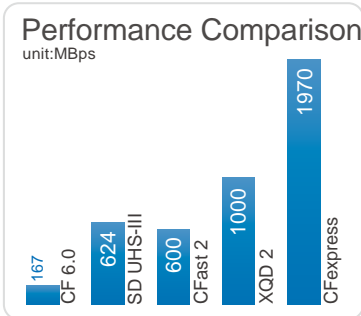
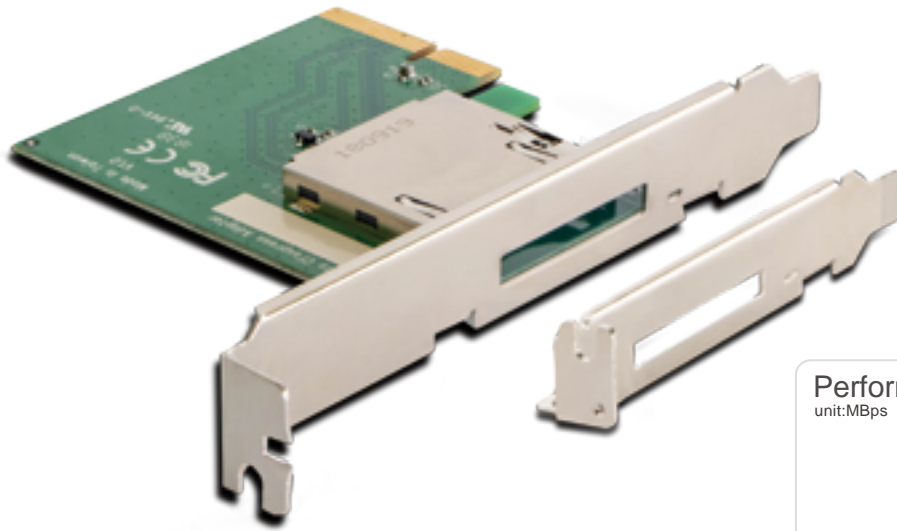




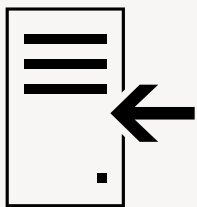
# PCIe > CFexpress

CFexpress socket with push-push function  
 for easy insertion/extraction of CFexpress Card  
 Support PCIe Generation 3 x 2  
 Support NVMe communication agreement

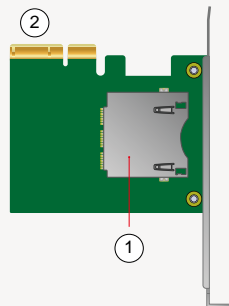
**1 x CFexpress slot**



CE FC



① external: 1 x CFexpress Card slot ② internal: 1 x PCI Express x 4



LxWxH: ca.68.0 x 65.3 x 6.4 mm / 2.68 x 2.57 x 0.25 inch  
 Weight: 40 g/ 0.75 oz

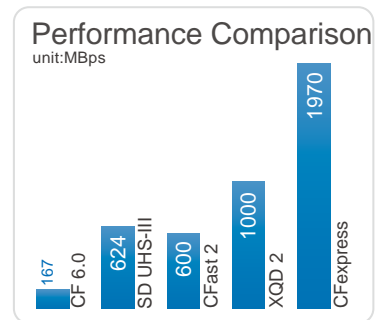


# CFexpress card 64 / 128 / 256 / 512 GB

Support 32-bit addressing mode  
PCIe Interface  
Compliant with NVMe 1.3  
PCIe Express Base Ver 3.1



21376 | 64 GB  
21377 | 128 GB  
21378 | 256 GB  
21379 | 512 GB



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**UFS**

[www.delock.de](http://www.delock.de)

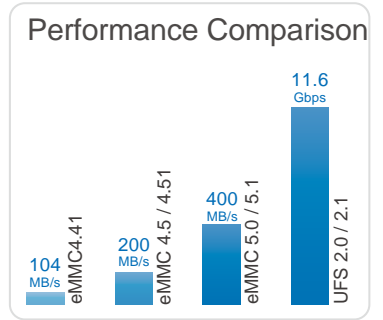
---

# USB 3.1 Gen 1 Type-C™ > UFS / SD 2 in 1

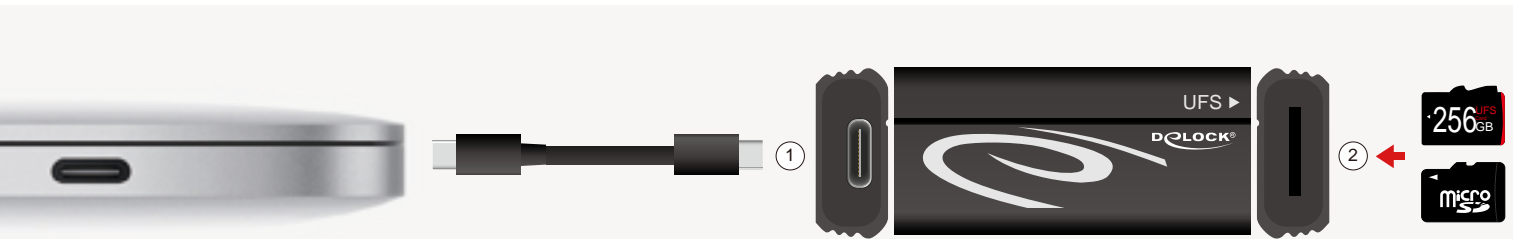
Supports UFS 2.1

Supports Micro SD UHS-I

**black**



CE FC



LxWxH: ca. 22 x 46 x 9.5 mm

- ① 1 x USB Type-C™ Gen1 female
- ② 1 x UFS / Micro SD UHS-I slot

Supports following memory cards: UFS + Micro SD UHS-I

Windows	Mac OS	Linux	transfer rate up to 5 Gb/s	Support Trim to UFS	LED indicator for power and access	Hot Swap Plug & Play
Vista/Vista-64/7/7-64/8/8-64 8.1/8.1-64/10/10-64	10.9	Mint 17				

# USB 3.1 Gen 1 Type-C™ > Multi-slots (support UFS)

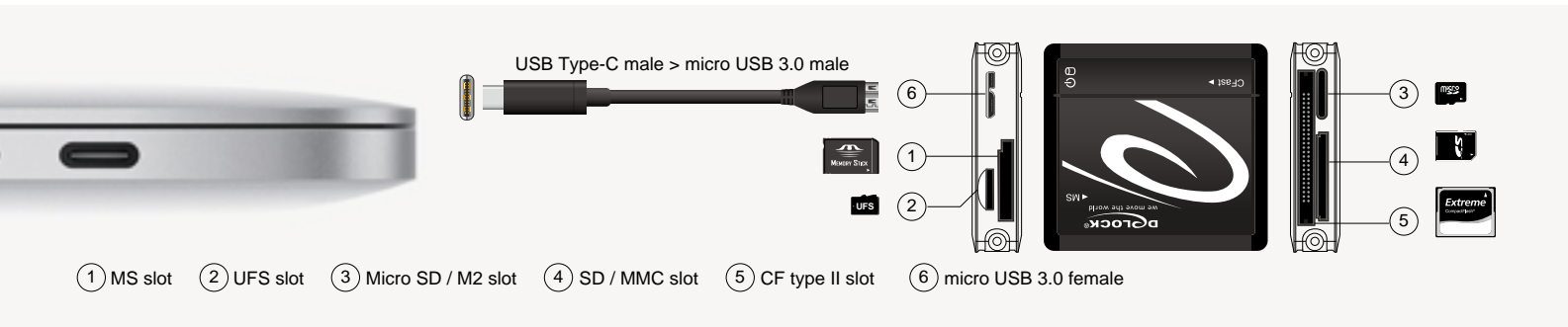
Supports UFS 2.1








Supports SD 4.0 (UHS-II) memory cards

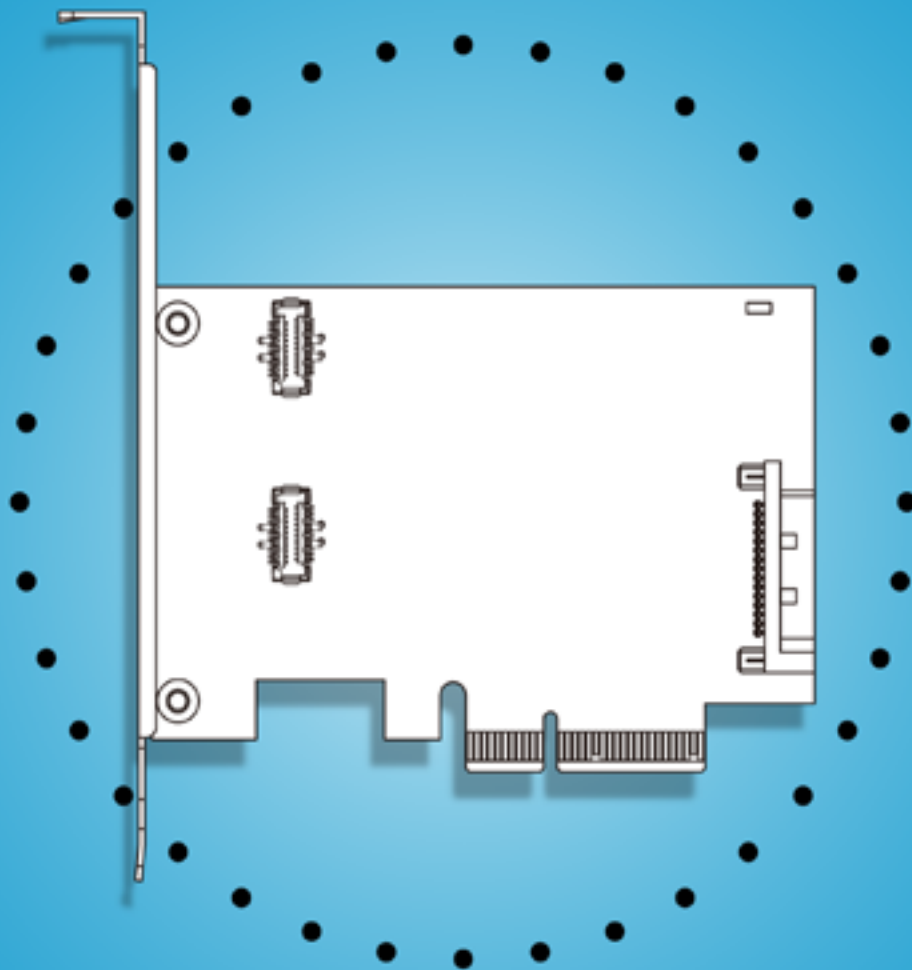
**black**



CE FC



-   
**Windows**  
 Vista/Vista-64/7/7-64/8/8-64  
 8.1/8.1-64/10/10-64
-   
**Mac OS**  
 10.9
-   
**Linux**  
 Mint 17
-   
**DATA**  
 transfer rate up to  
 5 Gb/s
-   
**Support  
Trim to UFS**
-   
**LED indicator for  
power and access**
-   
**Hot Swap  
Plug & Play**



# USB 3.1 Gen 2 internal

[www.delock.de](http://www.delock.de)

# PCI Express Card > 2 x internal USB 3.1 Gen 2 key A 20 pin female

Chipset: Asmedia ASM2142

Base on PCIe Gen 3 X 2 Support two ports total up to 16 Gbps

Power supply via PCI Express interface or via SATA 15 pin power connector

Supports extensible Host Controller Interface (xHCI) specification 1.1

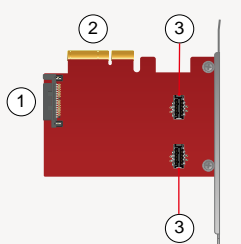
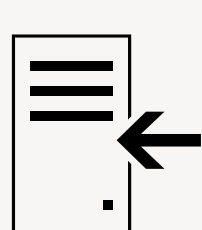
Compliant with USB Attached SCSI Protocol (UASP) Rev. 1.0

**Key A**

**10 Gbps**

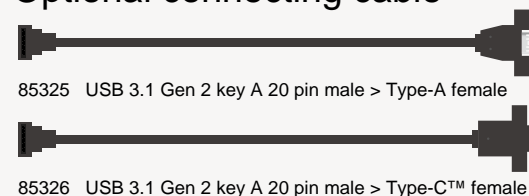


CE FC




① 1 x SATA 15 pin power plug    ② 1 x PCI Express x4, V3.0    ③ 2 x USB 3.1 Gen 2 key A 20 pin female

## Optional connecting cable



  
Windows  
7/7-64/8.1/8.1-64/10/10-64

  
Linux  
ex Kernel 4.4.x

  
transfer rate up to  
10 Gb/s

# PCI Express Card > 1 x internal USB 3.1 Gen 2 key B 20 pin female

Chipset: Asmedia ASM2142

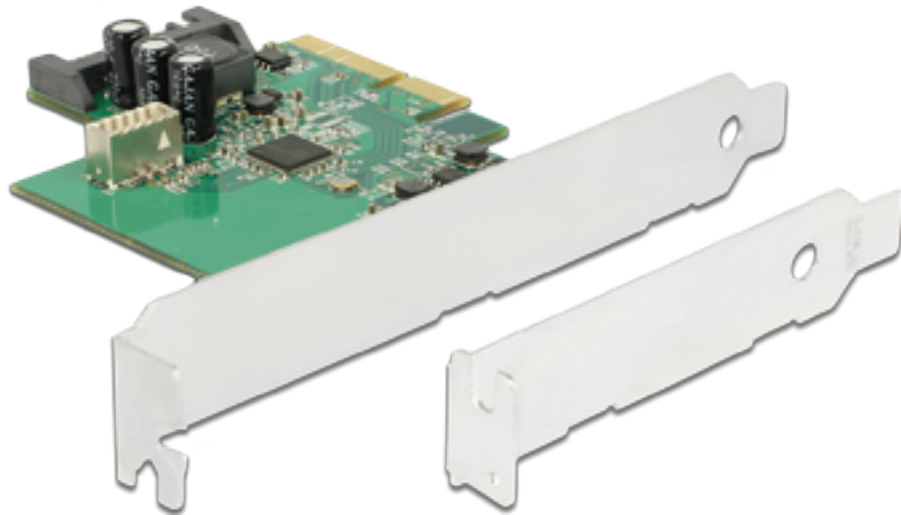
Power supply via PCI Express interface or via SATA 15 pin power connector

Supports extensible Host Controller Interface (xHCI) specification 1.1

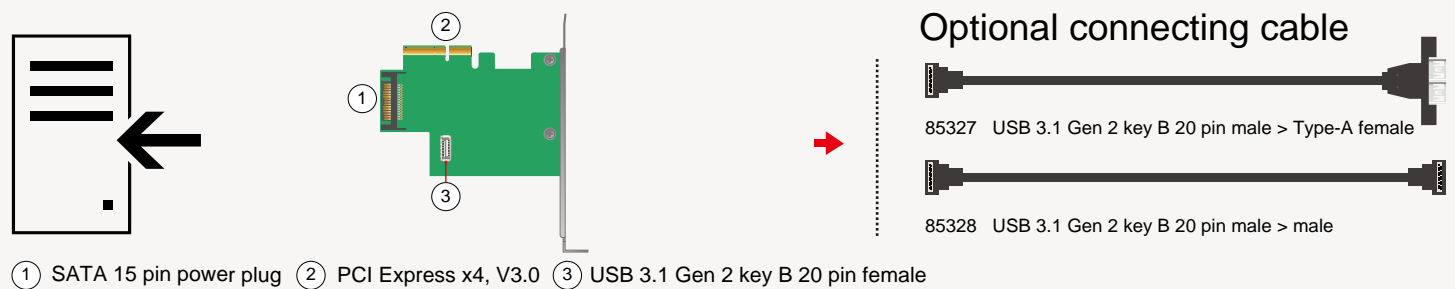
Compliant with USB Attached SCSI Protocol (UASP) Rev. 1.0

**Key B**


**10 Gbps**




CE FC




**Windows**  
7/7-64/8.1/8.1-64/10/10-64



**Linux**  
ex Kernel 4.4.x/4.9



transfer rate up to  
**10 Gb/s**



# PCI Express Card > 1 x internal USB 3.1 Gen 2 key A 20 pin female

Chipset: Asmedia ASM2142

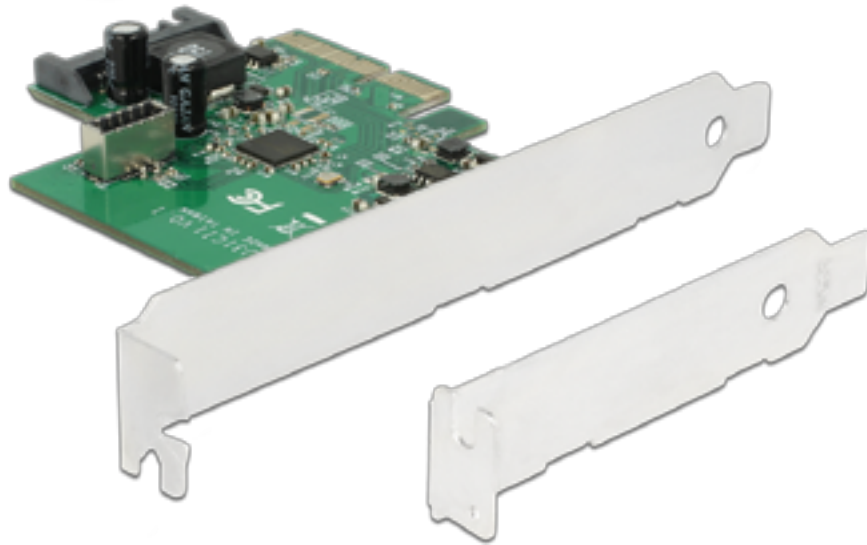
Power supply via PCI Express interface or via SATA 15 pin power connector

Supports extensible Host Controller Interface (xHCI) specification 1.1

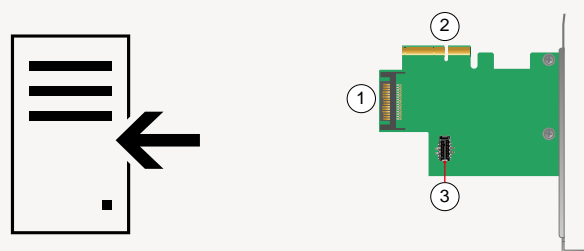
Compliant with USB Attached SCSI Protocol (UASP) Rev. 1.0

**Key A**

**10 Gbps**

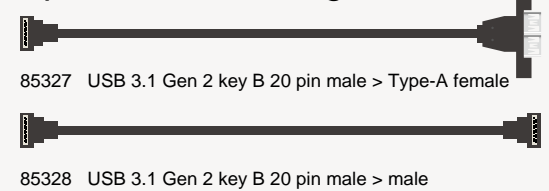


CE FC




① SATA 15 pin power plug ② PCI Express x4, V3.0 ③ USB 3.1 Gen 2 key A 20 pin female


## Optional connecting cable




**Windows**  
7/7-64/8.1/8.1-64/10/10-64



**Linux**  
ex Kernel 4.4.x/4.9



transfer rate up to  
**10 Gb/s**

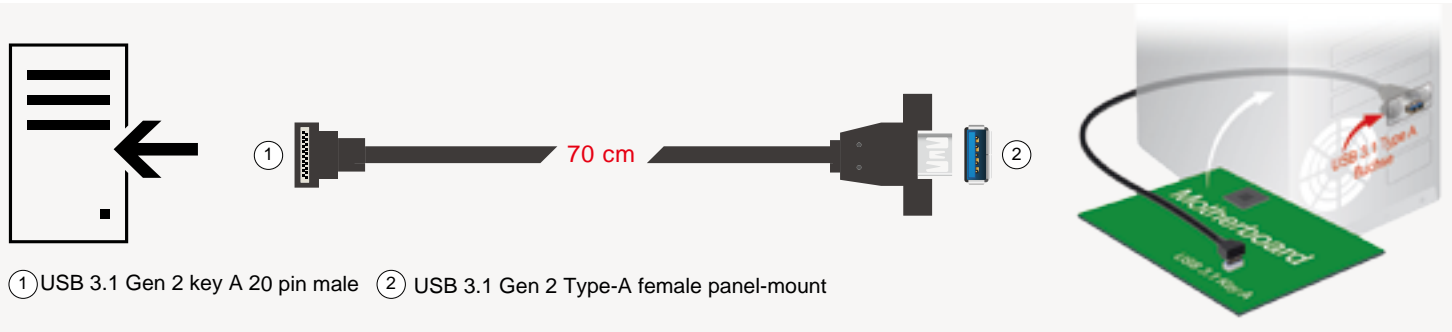
# USB 3.1 Gen 2 key A 20 pin male > USB 3.1 Gen 2 Type-A female panel-mount

**Key A**

**70 cm**



CE FC



transfer rate up to  
10 Gb/s



gauge(data line)  
28 + 30 AWG



gauge(power line)  
26 + 28 AWG



Resistor  
5.1 kΩ



diameter  
6 mm



Length:  
ca. 70 cm



Connector  
90° angled

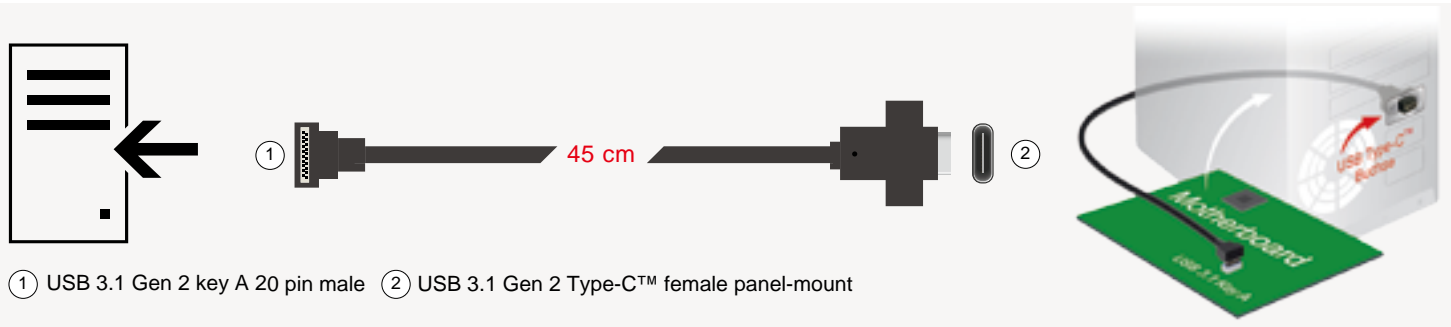
# USB 3.1 Gen 2 key A 20 pin male > USB 3.1 Gen 2 USB Type-C™ female panel-mount

**Key A**

**45 cm**



CE FC



transfer rate up to  
10 Gb/s



gauge(data line)  
28 + 30 AWG



gauge(power line)  
26 + 28 AWG



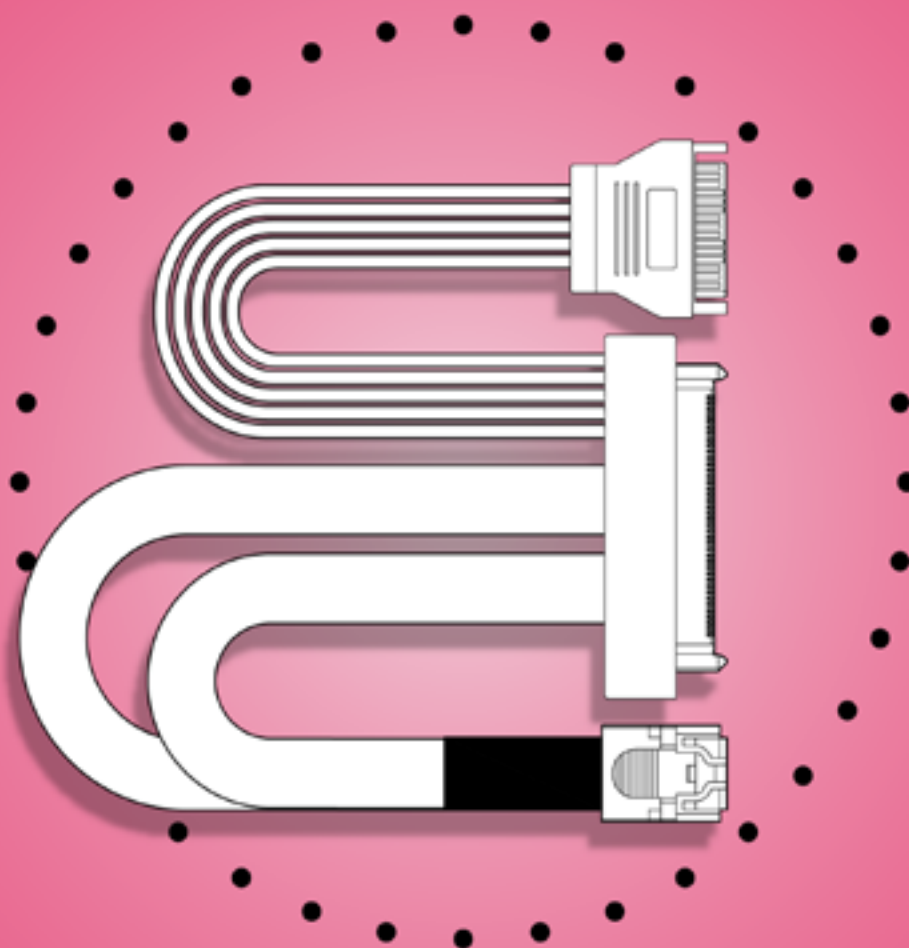
diameter  
5 mm



Length:  
ca. 45 cm



Connector  
90° angled



# SATA express & SFF

[www.delock.de](http://www.delock.de)

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# SATA Express 18 pin plug > SATA Express 18 pin plug

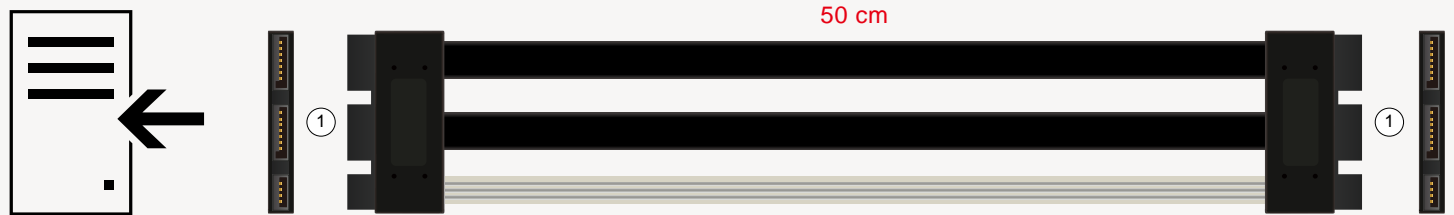
Data transfer rate up to 1 GB/s (PCI Express rev. 2.0) resp.  
2 GB/s (PCI Express rev. 3.0)

**50 cm**

**Grey / black**



CE FC



① SATA Express 18 pin plug



transfer rate up to  
2 Gb/s



Voltage  
5 V / 12 V



Cable gauge  
26 AWG



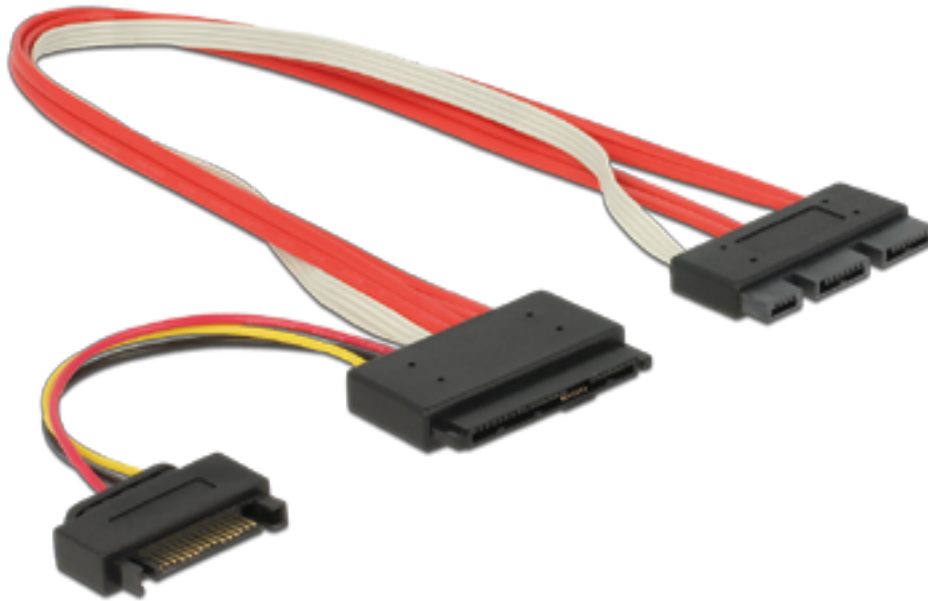
Length:  
ca. 50 cm

# SATA Express 18 pin plug + SATA Power > SATA Express 29 pin plug

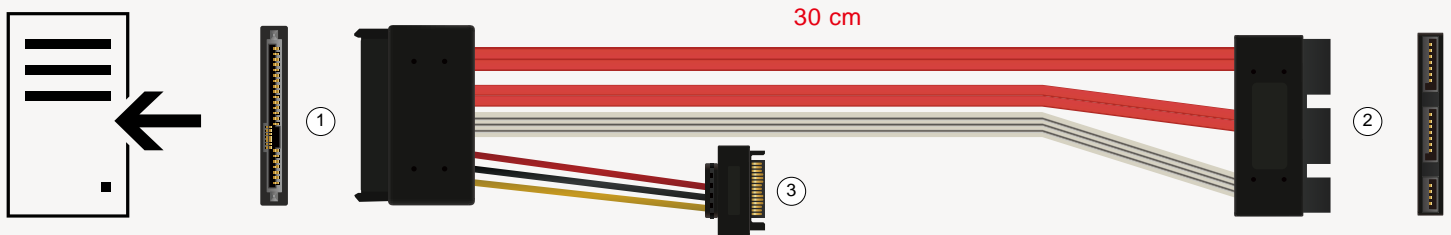
Data transfer rate up to 1 GB/s (PCI Express rev. 2.0) resp. 2 GB/s (PCI Express rev. 3.0)  
Supports AHCI and NVMHCI/NVMe protocol

**30 cm**

**red / Grey**



CE FC



① SATA Express 29 pin plug ② SATA Express 18 pin plug ③ SATA Power



transfer rate up to  
2 Gb/s



Voltage  
5 V / 12 V



Cable gauge  
26 AWG



Length:  
ca. 30 cm

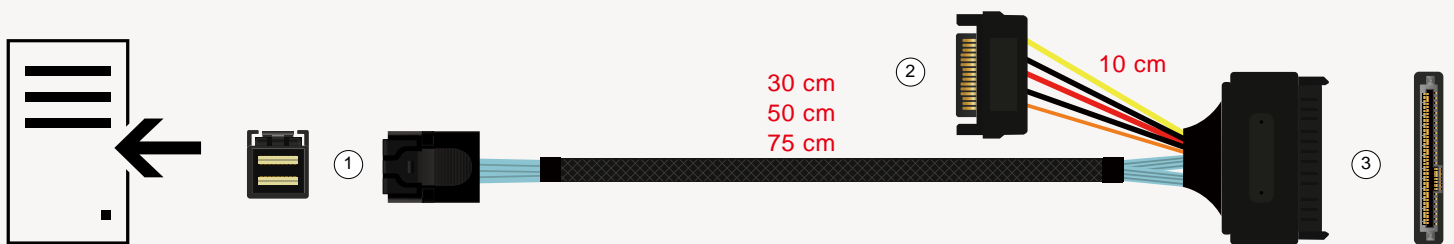
# SFF-8643 male > U.2 SFF-8639 female + SATA power connector

Data transfer rate up to 2 GB/s (PCI Express rev. 2.0)  
resp. 4 GB/s (PCI Express rev. 3.0)  
Supports NVM Express (NVMe)

- 30 cm**
- 50 cm**
- 75 cm**
- black**



84823 | 30 cm  
84819 | 50 cm  
84821 | 75 cm  
CE FC



① 1 x SFF-8643 male    ② 1 x SATA 15 pin receptacle    ③ 1 x U.2 SFF-8639 female



transfer rate up to  
4 Gb/s



gauge(data line)  
30 + 32 AWG



gauge(power line)  
18 + 24 AWG



Length:  
ca. 30 / 50 / 75 cm



# SFF-8643 male angled > U.2 SFF-8639 female + SATA power connector

Data transfer rate up to 2 GB/s (PCI Express rev. 2.0)

resp. 4 GB/s (PCI Express rev. 3.0)

Supports NVM Express (NVMe)

**75 cm**

**black**



CE FC



① 1 x SFF-8643 male    ② 1 x SATA 15 pin receptacle    ③ 1 x U.2 SFF-8639 male



transfer rate up to  
4 Gb/s



gauge(data line)  
30 + 32 AWG



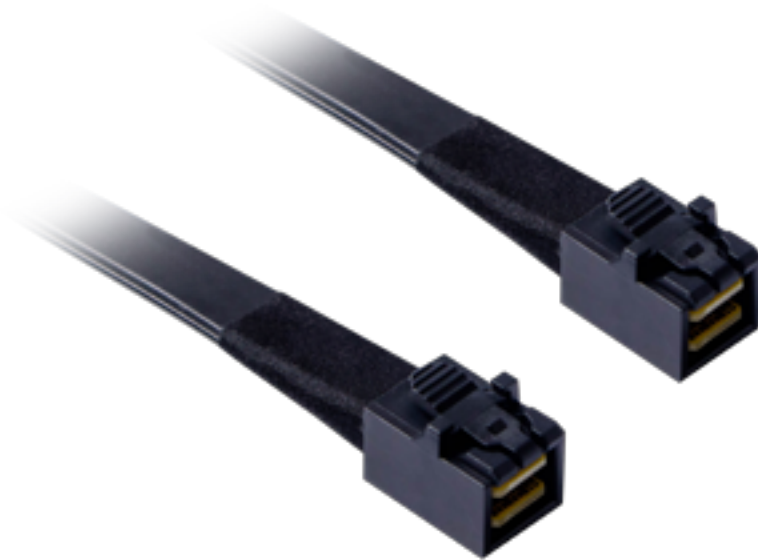
gauge(power line)  
18 + 24 AWG



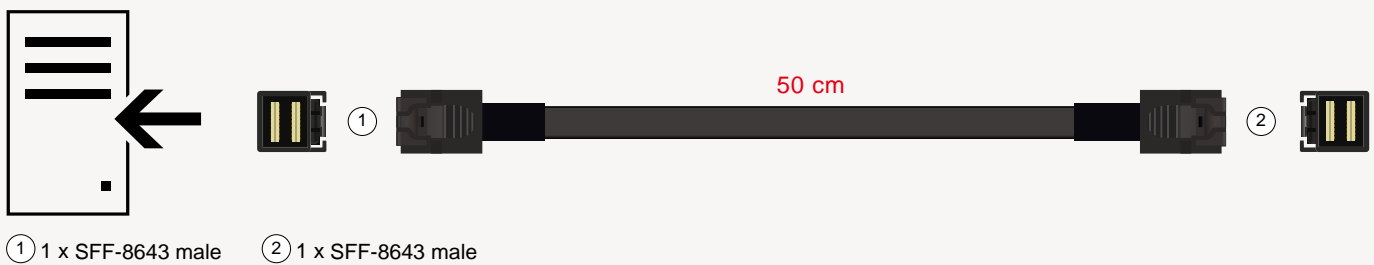
Length:  
ca. 75 cm

# SFF-8643 male > SFF-8643 male

**50 cm**

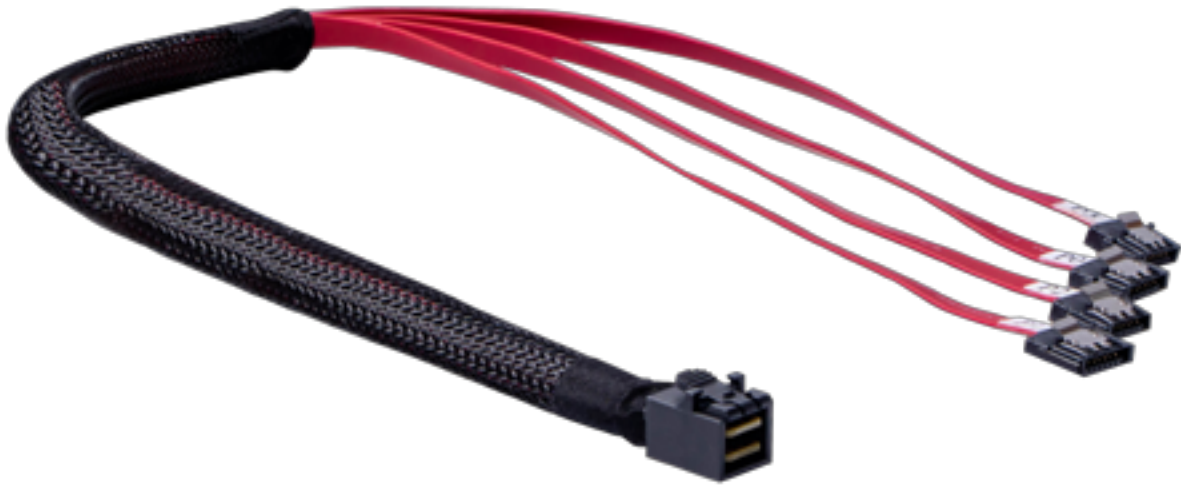


CE FC



# SFF-8643 male > 4 x SATA 7 pin female

**50 cm**

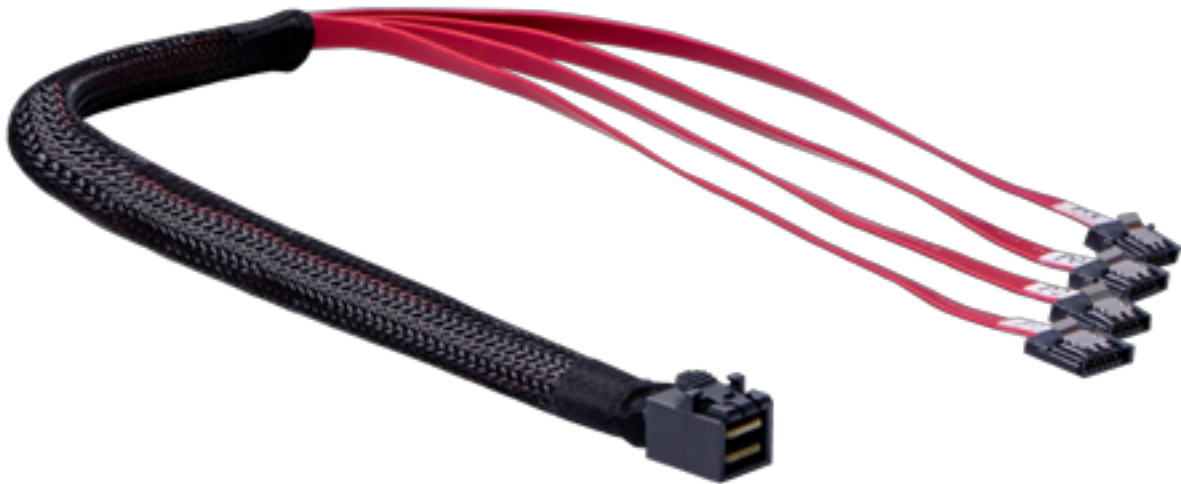


CE FC

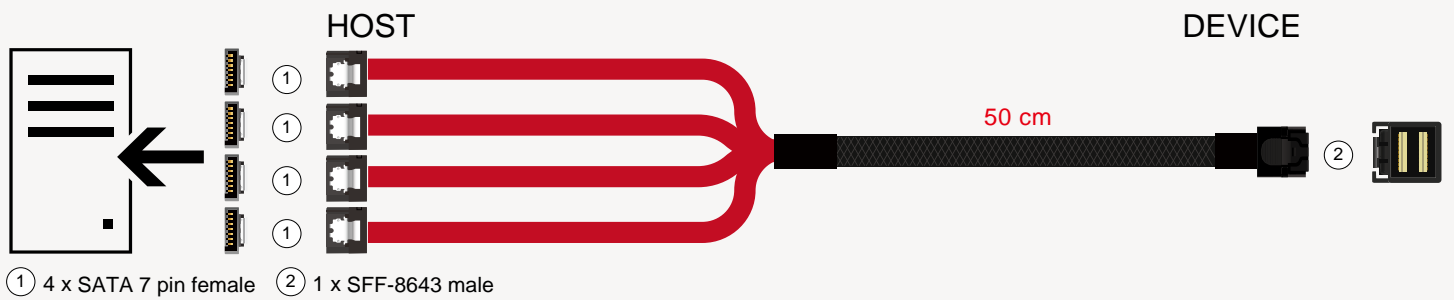


# SFF-8643 male > 4 x SATA 7 pin female

**50 cm**

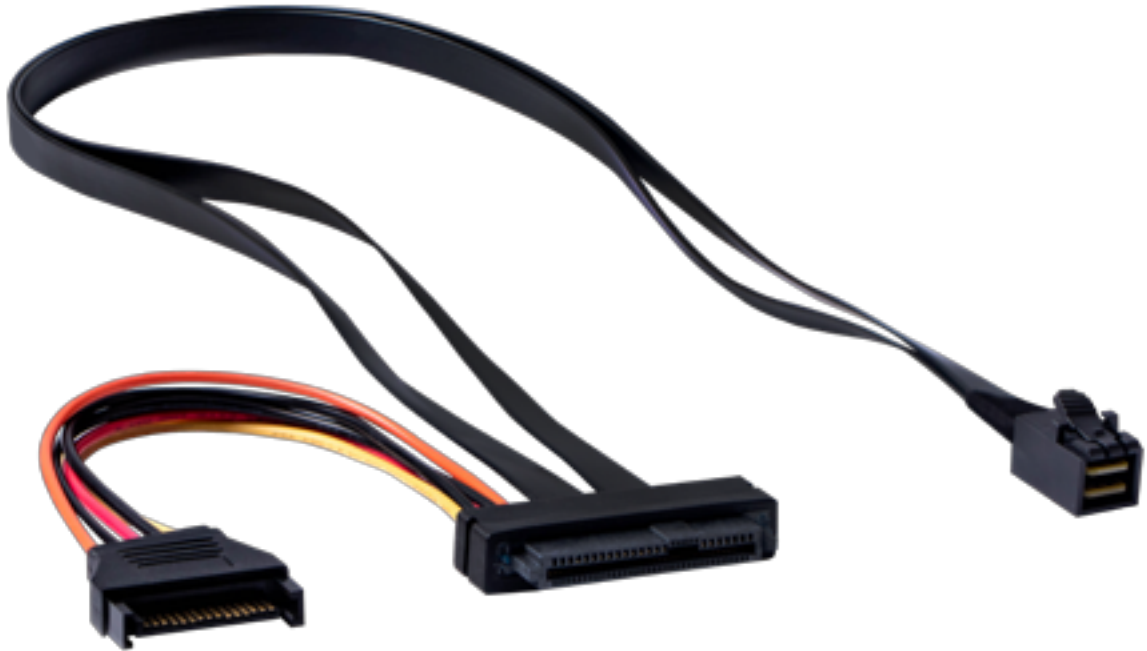


CE FC



# SFF-8639 female > SFF-8643 male + SATA 15 pin male

**48 + 14 cm**

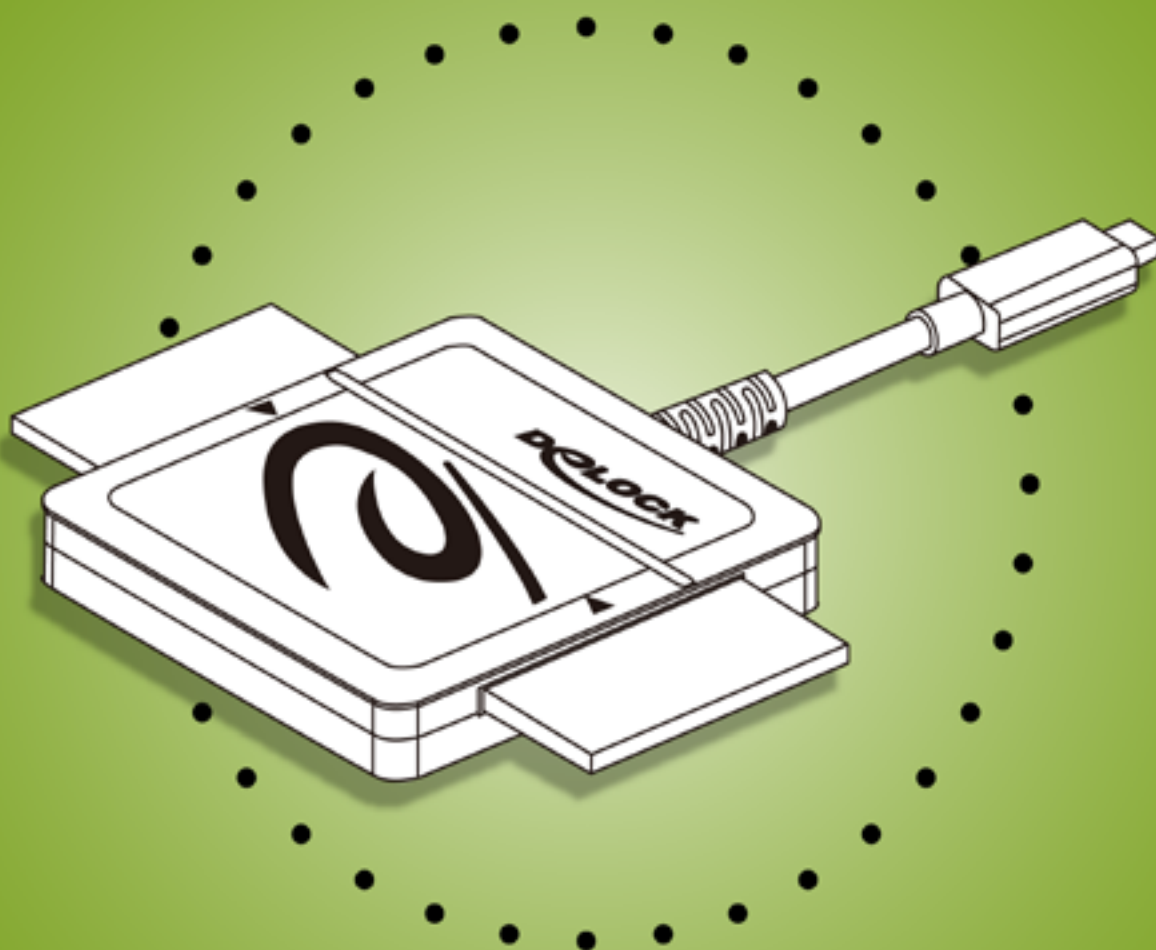


CE FC



① 1 x SFF-8639 female    ② 1 x SATA 15 pin receptacle    ③ 1 x SFF-8643 male

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we move the world



**CFast II**  
[www.delock.de](http://www.delock.de)

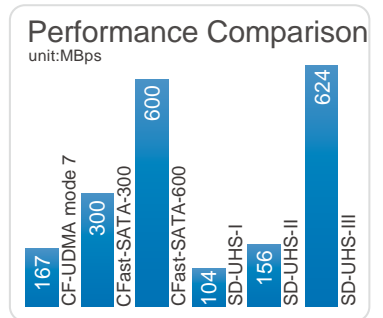
---

# USB3.1 Gen 2 Type-C™ > CFast 2.0 x 2

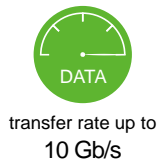
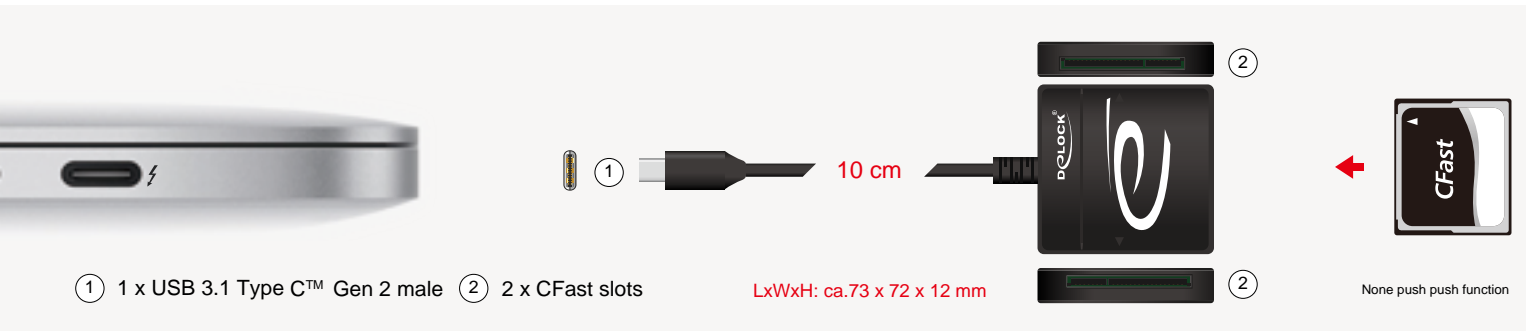
CFast type I memory card, support CFast 2.0

**2 x CFast slot**

**black**



CE FC



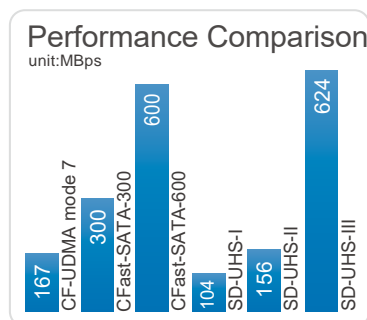


# 2.5" Card Reader SATA > CFast 2.0

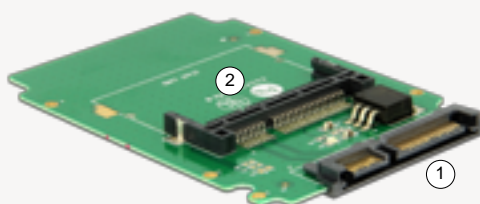
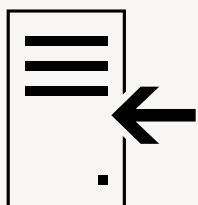
Supports CFast type I / II memory cards, support CFast 2.0  
OS independent, no driver installation necessary

**Bootable**

**1 x CFast slot**



CE FC



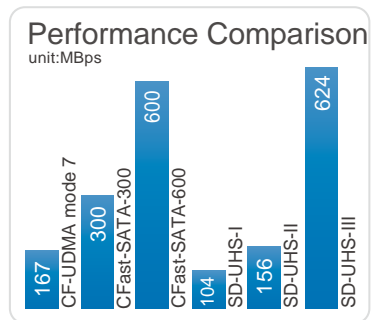
① 1 x SATA 3 Gb/s 22 pin female    ② 1 x CFast slot

LxWxH: ca. 100 x 70 x 5.5 mm

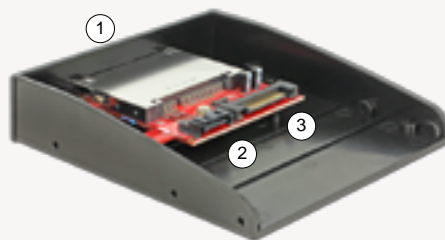
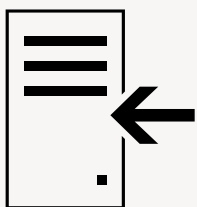
# 3.5" Card Reader SATA > CFast

Push to push CFast socket  
 Supports CFast type I / II memory cards  
 Supports CFast 1.0 and 2.0

- Bootable**
- 1 x CFast slot**



CE FC



external: ① 1 x CFast slot    internal: ② 1 x SATA 7 pin plug    ③ 1 x SATA 15 pin plug



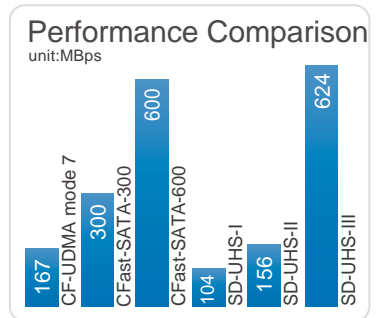
push & push

# CFast Adapter for SDXC / SDHC / SD Memory Cards

Push to push SD socket  
for digital cameras with CFast slot  
To use standard SDXC / SDHC / SD memory cards

**1 x SD slot**


**CFast type II**



  
**Windows**  
7/7-64/8.1/8.1-64  
10/10-64

  
**Mac OS**  
Lion 10.9

  
**Linux**  
Kernel 3.19

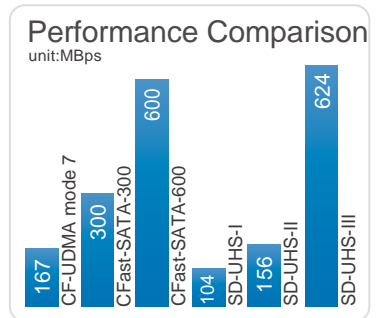
  
Supports memory up to  
2 TB

  
file system  
FAT / FAT32 / exFAT / NTFS

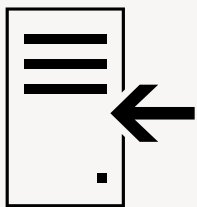
# 3.5" Card Reader SATA > CFast

Push to push CFast socket  
 Supports CFast type I / II memory cards  
 Supports CFast 1.0 and 2.0

- Bootable**
- 1 x CFast slot**



CE FC



internal: ① 1 x SATA 22 pin plug external: ② 1 x CFast slot



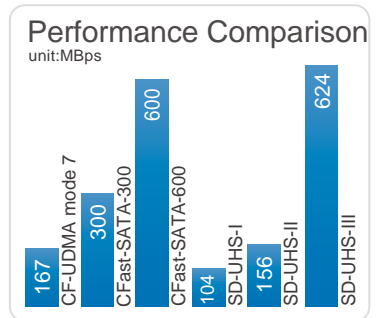
push & push

# Card Reader SATA > CFast 2.0

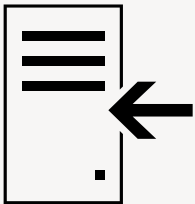
Supports CFast card type II, support CFast 2.0  
Push to push CFast socket

**Bootable**

**1 x CFast slot**



CE FC



① 1 x SATA 22 pin male ② 1 x CFast slot



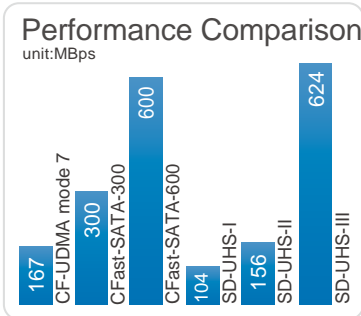
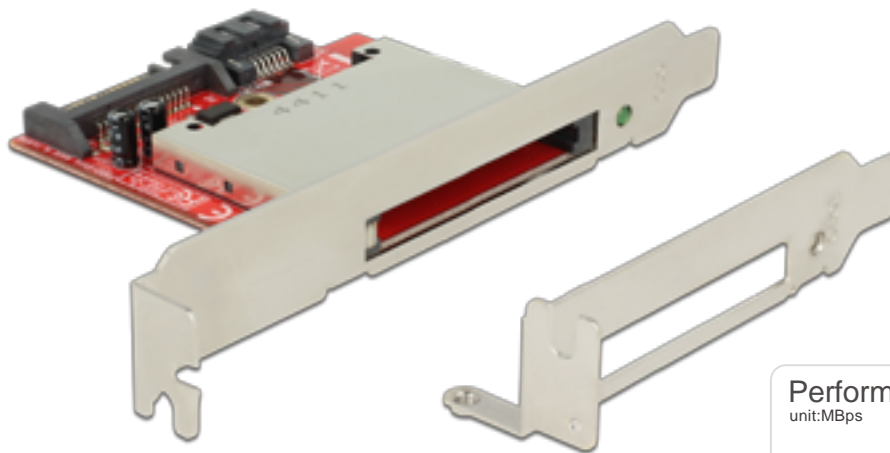
LxWxH: ca. 66.5 mm x 64 mm x 7.3 mm



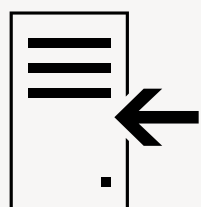
# SATA Card Reader for CFast Low Profile Form Factor

Push to push CFast socket  
 Supports CFast type I / II memory cards  
 Supports CFast 1.0 and 2.0  
 OS independent, no driver installation necessary

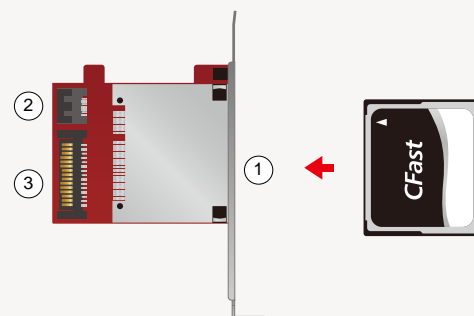
- Bootable**
- 1 x CFast slot**



CE FC



external: ① 1 x CFast slot      internal: ② 1 x SATA 7 pin male    ③ 1 x SATA 15 pin male



push & push

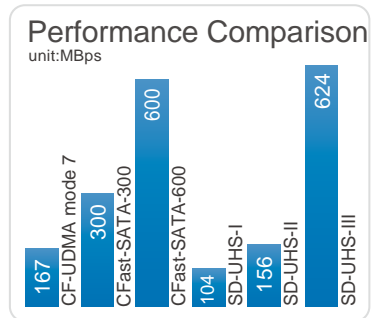
# External Enclosure 2 x CFast 2.0 > USB 3.1 Gen 2 with RAID

Chipset: Asmedia ASM1352R

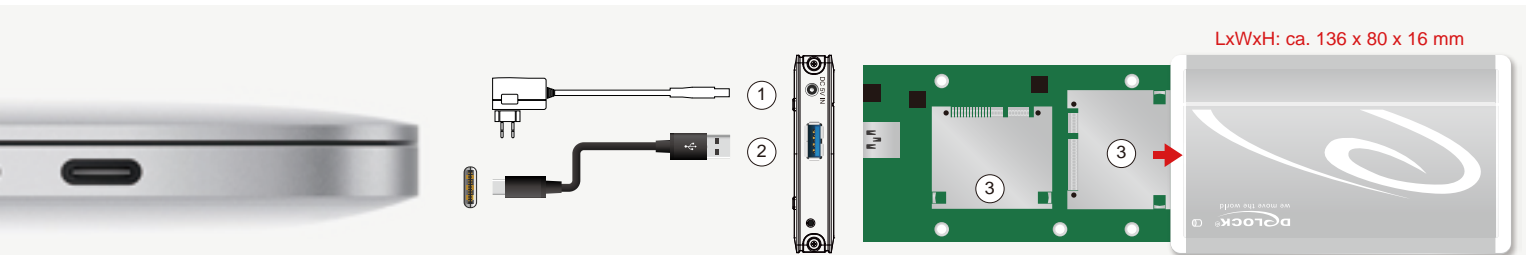
Supports CFast type I / II memory cards, support CFast 2.0

Supports RAID 0, 1, SPAN, Port Multiplier

- RAID**
- 2 x CFast slot**
- silver**



CE FC



external: ① 1 x 5 V DC jack ② 1 x SuperSpeed USB 10 Gbps (USB 3.1 Gen 2) Type-A female      inter: ③ 2 x CFast 2.0 slot

**Windows**  
7/7-64/8.1/8.1-64  
10/10-64

**Linux**  
ex Kernel 4.6

**DATA**  
transfer rate up to  
10 Gb/s

**PCB Full-PCB**

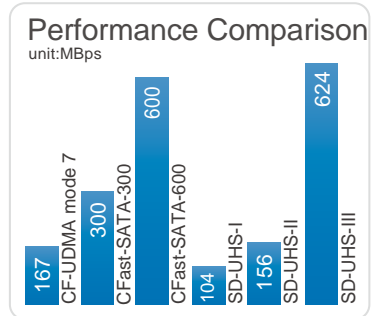
**Hot Swap Plug & Play**



# USB 3.0 Card Reader > CFast 2.0

To read and write CFast memory cards  
 Supports CFast type I / II memory cards  
 Downwards compatible to CFast 1.0

- 1 x CFast slot**
- Aluminium**
- black**



CE FC




① 1 x USB 3.0 Type Micro-B female    ② 1 x CFast 2.0 slot

LxWxH: ca. 82 x 60 x 12 mm

  
**Windows**  
 XP/Vista/7/7-64  
 8.1/8.1-64/10/10-64

  
**Mac OS**  
 10.7 / 10.8

  
**Linux**  
 ex Kernel 3.13

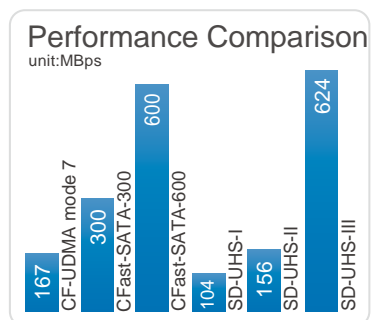
  
 transfer rate up to  
**5 Gb/s**

  
 Hot Swap  
**Plug & Play**

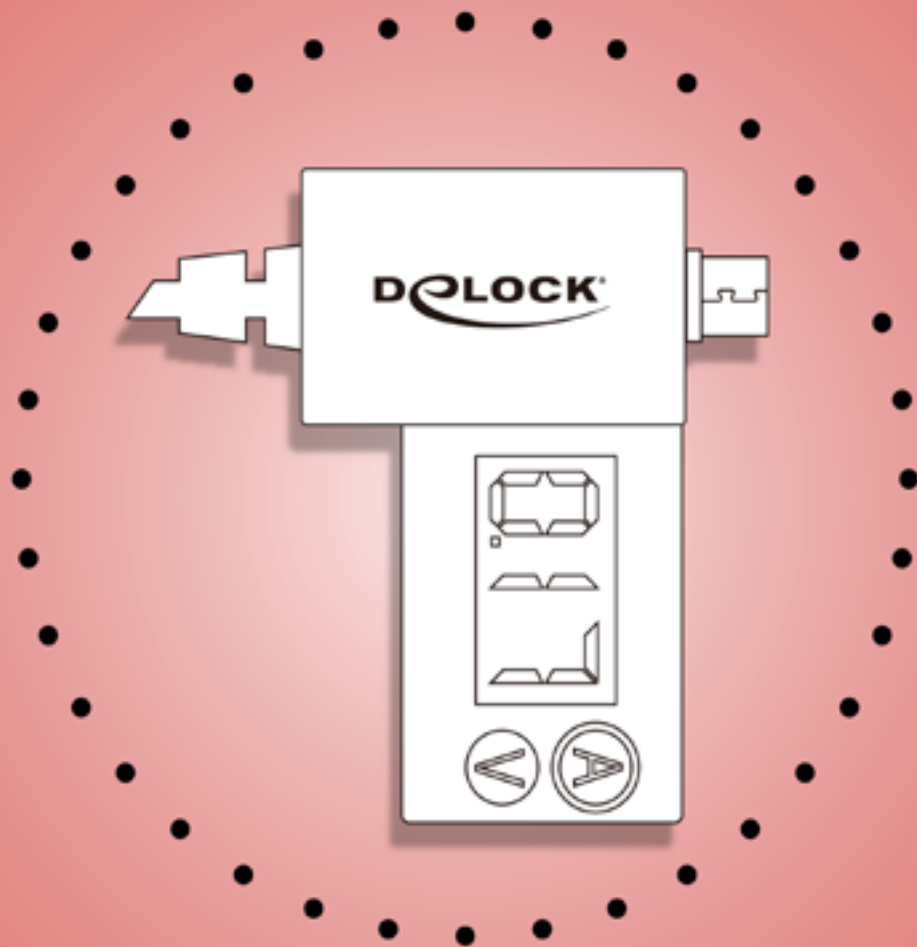
# CFast Flash Card SATA 6 Gb/s Typ MLC



54538   8 GB	54699   8 GB
54649   16 GB	54700   16 GB
54650   32 GB	54701   32 GB
54651   64 GB	54702   64 GB
54652   128 GB	54703   128 GB



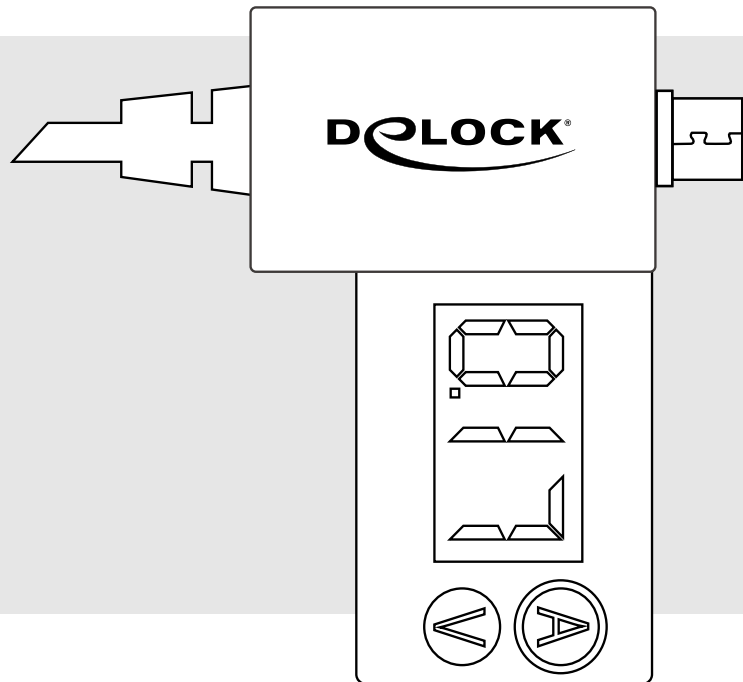
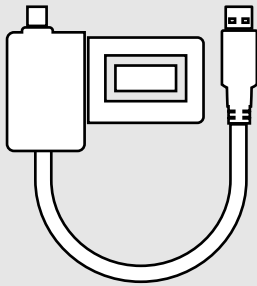
ITEM NO	54538	54649	54650	54651	54652	54699	54700	54701	54702	54703
Capacity	8 GB	16 GB	32 GB	64 GB	128 GB	8 GB	16 GB	32 GB	64 GB	128 GB
Interface:	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Chip:	Toshiba	Toshiba	Toshiba	Toshiba	Toshiba	Toshiba	Toshiba	Toshiba	Toshiba	Toshiba
Flash Typ:	MLC	MLC	MLC	MLC	MLC	MLC	MLC	MLC	MLC	MLC
Max. Channel:	2	2	2	2	2	2	2	2	2	2
Maximum speed (read):	310 MB/s	310 MB/s	310 MB/s	310 MB/s	310 MB/s	100 MB/s	220 MB/s	200 MB/s	200 MB/s	200 MB/s
Maximum speed (write):	150 MB/s	150 MB/s	150 MB/s	150 MB/s	150 MB/s	20 MB/s	35 MB/s	70 MB/s	110 MB/s	110 MB/s
Maximum write cycles:	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Maximum power consumption:	1.1 W	1.1 W	1.1 W	1.1 W	1.1 W	1.1 W	1.1 W	1.1 W	1.1 W	1.1 W
S.M.A.R.T.:	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Vibration:	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H	20 G - 7 ~ 2000 H
Shock:	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms	1500 G - 0.5 ms
MTBF:	>3 million hours	>3 million hours	>3 million hours	>3 million hours	>3 million hours	>3 million hours	>3 million hours	>3 million hours	>3 million hours	>3 million hours
Storage temperature:	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C	-55°C ~ +95°C
Operation temperature:	0 °C ~ +70 °C	0 °C ~ +70 °C	0 °C ~ +70 °C	0 °C ~ +70 °C	0 °C ~ +70 °C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
						Industrial Grade	Industrial Grade	Industrial Grade	Industrial Grade	Industrial Grade



# USB tester with LED indicator for Volt and Ampere

[www.delock.de](http://www.delock.de)

# USB tester with LED indicator for Volt and Ampere



Cable USB 2.0 A male >  
Micro-B male with LED indicator for  
Volt and Ampere  
83569



- Connectors:
  - 1 x USB 2.0 Type-A male >
  - 1 x USB 2.0 Type Micro-B male
- 3 digits LED indicator
- Automatical switching between Volt and Ampere display
- For direct voltage 5 V
- Max. 2.4 A
- Colour: black
- Cable length: ca. 1 m
- System requirements:
  - One free USB-A female

# USB tester with LED indicator for Volt and Ampere

Micro USB Adapter with LED indicator for Voltage and Ampere

65682



- Connectors:  
USB 2.0 type Micro-B male >  
USB 2.0 type Micro-B female
- 3 digits LED indicator
- Automatical switching between Volt and Ampere display

- For direct voltage 5 V (max. indication up to 6.00 V)
- Max. 4 A
- Colour: black
- Dimensions incl. connector (LxWxH):  
ca. 48 x 15 x 9 mm

- System requirements  
- A free USB Micro-B female port

# Micro USB Adapter with LED indicator for Voltage and Ampere

65688



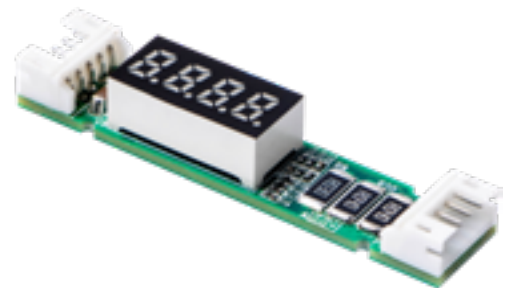
- Connectors:  
USB 2.0 type Micro-B male >  
USB 2.0 type Micro-B female
- 3 digits LED indicator
- Automatical switching between Volt and Ampere display

- For direct voltage 5 V (max. indication up to 6.00 V)
- Max. 4 A
- Colour: black
- Dimensions incl. connector (LxWxH):  
ca. 48 x 15 x 9 mm

- System requirements  
- A free USB Micro-B female port

# USB Voltage and Current Tester Kit

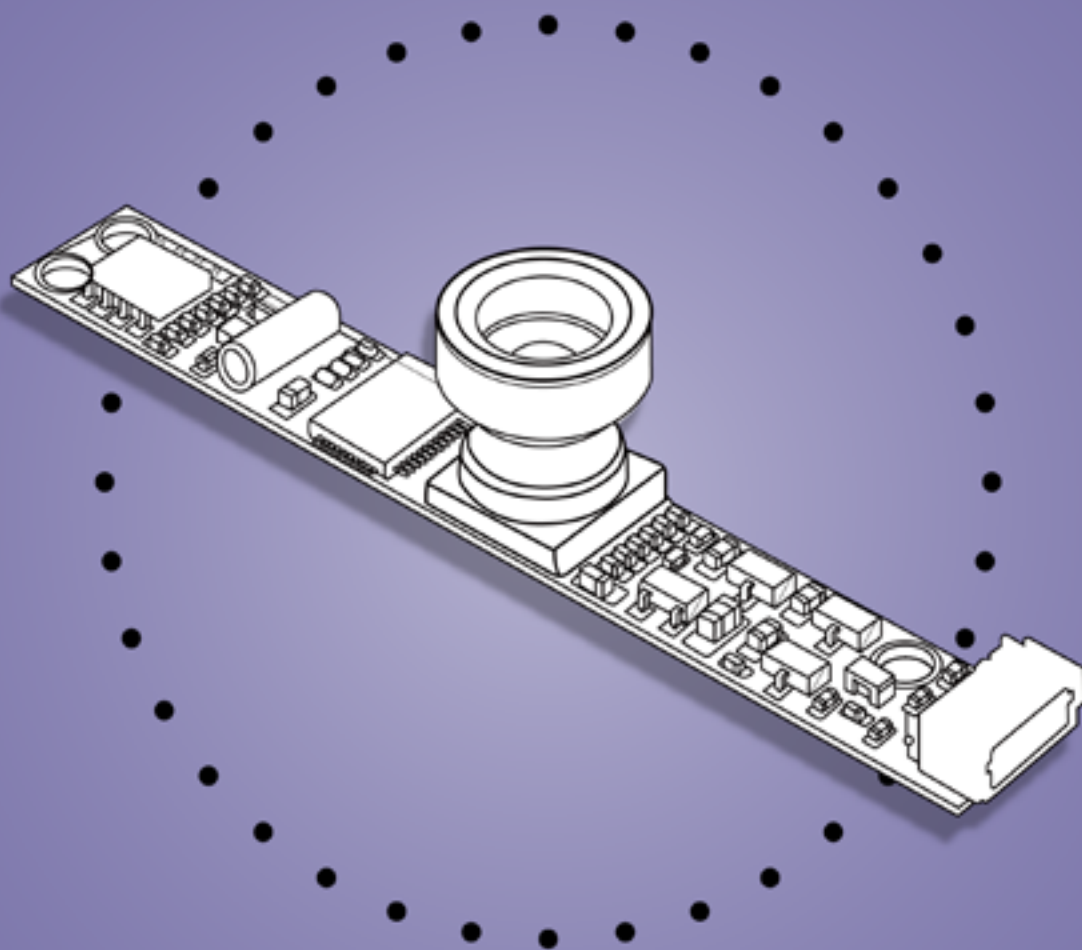
21367



- 4 digits LED indicator
- Automatic switching between Voltage and current display
- Voltage: 3.3V- 20V ,error +- 2%
- Current: 0.01A-3A , error +- 0.01A~0.02A
- Support USB 2.0

- Connector:  
1 x 5pin wafer pitch 2.0 (Host)>  
1 x 5pin wafer pitch 2.0 (Device)
- Data transfer rate up to:  
Hi-Speed 480 Mbps,  
Full-Speed 12 Mbps,  
Low-Speed 1.5 Mbps

- Complies with USB 2.0
- Dimensions (LxWxH): ca. 70 x 16 x 12 mm
- Hot Swap, Plug & Play

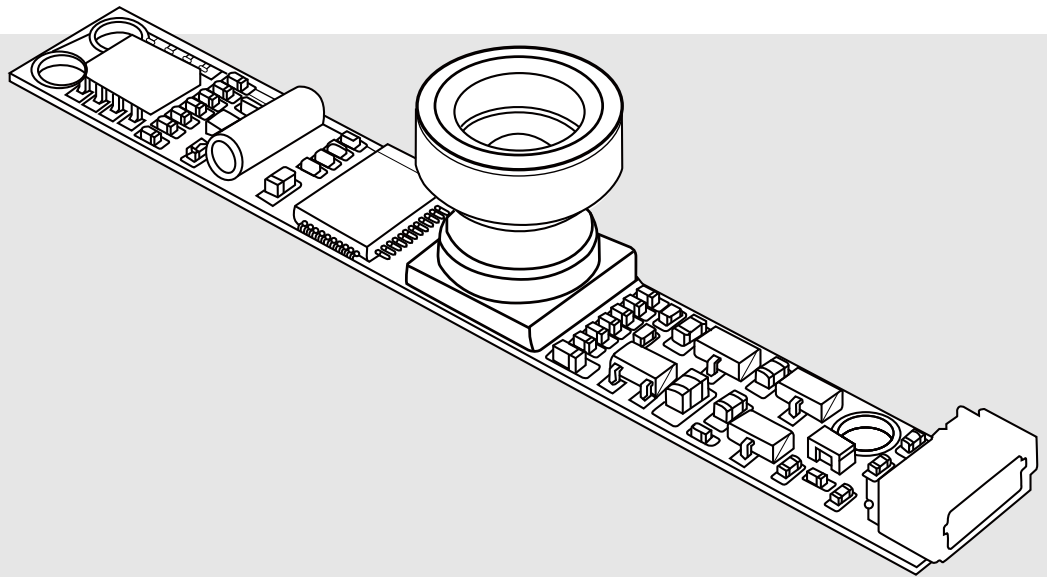
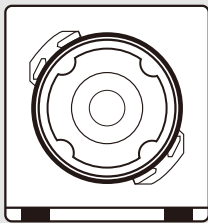


# Camera Module

[www.delock.de](http://www.delock.de)

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# Camera Module



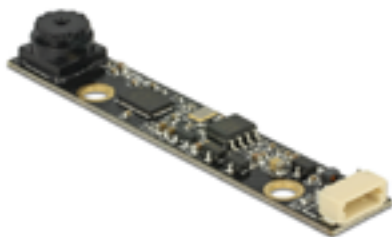
## Delock USB 2.0 Camera Module



- Connector: 5 pin SMT plug, 1 mm pitch (ACES 87214-0500), USB 2.0 high speed
- Resolution: 1.92 Mega Pixel
- Supports resolutions: 720 p (1280 x 720)
- Different fully-automated shutter priority:
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black level calibration (ABLC)
- Image quality controls including colour saturation, gamma, sharpness,

- lens correction, white pixel cancelling, noise cancelling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Suspend: 9 mA
  - Active: 100 mA ± 10 mA @ 720p
- Operating voltage: 5 V
- Operating temperature: 0 °C ~ 50 °C
- Lens dimension: 1/4 "
- Fix focus: 0.3 m ~ infinity

- Lense: F/2.5
- Frame rates: 30fps @ HVGA, VGA, XGA 720p, QVGA
- Dimension (LxWxH): 60.0 x 8.0 x 6.3 mm
- System requirements:
  - Windows Vista 7/8/10
  - MS DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - CPU minimum P4 1.4 GHz, 128 MB RAM



Delock USB 2.0 IR Camera Module 1.92 mega pixel 45° edge fix focus

**Without optical IR filter**

96366



# Camera Module

## Delock USB 2.0 Camera Module



- Connector: USB 2.0 5 pin jack SMT, 1 mm pitch
- Resolution: 3.14 Mega Pixel
- Standard SCCB interface (I<sup>2</sup>C Bus)
- Output support for RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422 and compression
- Maximum resolution: QXGA (2048 x 1536)
- Automatic image control functions including
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLC)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling, noise canceling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Sensor suspend: 90 mA
  - Sensor active: 430 mA ± 5 mA @ 640 x 480 pixel
- Operating voltage: 5 V DC
- Operating temperature: 5 °C ~ 50 °C
- Relative humidity during operation: max. 80 %
- Sensor size: 1/4 inch
- Sensitivity: 0.6 V (lx s)
- Signal to noise ratio: 36 dB
- Dynamic range: 68 dB
- Fix focus: 0.3 m ~ infinite
- Lens: F/2.5
- Frame rates:
  - 30 fps @ HVGA, VGA, XGA, 720p, QVGA
  - 15 fps @ UXGA, 1080p, QXGA
- Dimension (LxWxH): ca. 60 x 8 x 13 mm
- System requirements:
  - PC with UVC support
  - Windows Vista/ 7/ 8/ 10
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM
- System requirements:
  - PC with UVC support
  - Windows Vista/ 7/ 8/ 10
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM



Delock USB 2.0 Camera Module 3.14 mega pixel 80° V5 fix focus

**With optical IR filter**

95978



Delock USB 2.0 IR Camera Module 3.14 mega pixel 80° V5 fix focus

**Without optical IR filter**

95979

# Camera Module

## Delock USB 2.0 Camera Module



- Connector: USB 2.0 5 pin jack SMT, 1 mm pitch
- Resolutiob: 5.04 Mega Pixel
- Standard SCCB interface (I<sup>2</sup>C Bus)
- Output support for RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422 and compression
- Maximum resolution: QSXGA (2592 x 1944)
- Automatic image control functions including
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLCL)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling, noise canceling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Sensor suspend: 90 mA
  - Sensor active: 140 mA ± 5 mA @ 640 x 480 pixel
- Operating voltage: 5 V DC
- Operating temperature: 5 °C ~ 50 °C
- Relative humidity during operation: max. 80 %
- Sensor size: 1/4 inch
- Sensitivity: 0.6 V (lx s)
- Signal to noise ratio: 36 dB
- Dynamic range: 68 dB
- Fix focus: 0.3 m ~ infinite
- Lens: F/2.5
- Frame rates:
  - 30 fps @ HVGA, VGA, XGA, 720p, QVGA
  - 15 fps @ UXGA, 1080p, QXGA
  - 7 fps @ 2592 x 1944
- Dimension (LxWxH): ca. 60 x 8 x 13 mm
- System requirements:
  - PC with UVC support
  - Windows Vista/ 7/ 8/ 10
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM



Delock USB 2.0 Camera Module 5.04 mega pixel 80° fix focus

**With optical IR filter**

96368



Delock USB 2.0 IR Camera Module 5.04 mega pixel 80° V5 fix focus

**Without optical IR filter**

96367

# Camera Module

## Delock USB 2.0 Camera Module



- Connector: USB 2.0 5 pin jack SMT, 1 mm pitch
- Resolution: 3.14 Mega Pixel
- Standard SCCB interface (I<sup>2</sup>C Bus)
- Output support for RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422 and compression
- Maximum resolution: QXGA (2048 x 1536)
- Automatic image control functions including
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLC)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling, noise canceling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Sensor suspend: 90 mA
  - Sensor active: 430 mA ± 5 mA @ 640 x 480 pixel
- Operating voltage: 5 V DC
- Operating temperature: 5 °C ~ 50 °C
- Relative humidity during operation: max. 80 %
- Sensor size: 1/4 inch
- Sensitivity: 0.6 V (lx s)
- Signal to noise ratio: 36 dB
- Dynamic range: 68 dB
- Fix focus: 0.3 m ~ infinite
- Lens: F/3.0
- Frame rates:
  - 30 fps @ HVGA, VGA, XGA, 720p, QVGA
  - 15 fps @ UXGA, 1080p, QXGA
- Dimension (LxWxH): ca. 60 x 8 x 12 mm
- System requirements:
  - PC with UVC support
  - Windows Vista/ 7/ 8/ 10
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM



Delock USB 2.0 Camera Module 3.14 mega pixel 55° V5 fix focus

**With optical IR filter**

95977



Delock USB 2.0 IR Camera Module 3.14 mega pixel 55° V5 fix focus

**Without optical IR filter**

95981

# Camera Module

## Delock USB 2.0 Camera Module



- Connector:
  - USB 2.0 5 pin jack SMT, 1 mm pitch
- Resolution: 5.04 Mega Pixel
- Standard SCCB interface (I<sup>2</sup>C Bus)
- Output support for RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422 and compression
- Maximum resolution: QSXGA (2592 x 1944)
- Automatic image control functions including
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLC)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling, noise canceling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Sensor suspend: 90 mA
  - Sensor active: 140 mA ± 5 mA @ 640 x 480 pixel
- Operating voltage: 5 V DC
- Operating temperature: 5 °C ~ 50 °C
- Relative humidity during operation: max. 80 %
- Sensor size: 1/4 inch
- Sensitivity: 0.6 V (lx s)
- Signal to noise ratio: 36 dB
- Dynamic range: 68 dB
- Fix focus: 0.3 m ~ infinite
- Lens: F/3.0
- Frame rates:
  - 30 fps @ HVGA, VGA, XGA, 720p, QVGA
  - 15 fps @ UXGA, 1080p, QXGA
  - 7 fps @ 2592 x 1944
- Dimension (LxWxH): ca. 60 x 8 x 12 mm
- System requirements:
  - PC with UVC support
  - Windows Vista/ 7/ 8/ 10
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM



Delock USB 2.0 Camera Module 5.04 mega pixel 55° V5 fix focus

**With optical IR filter**

96370



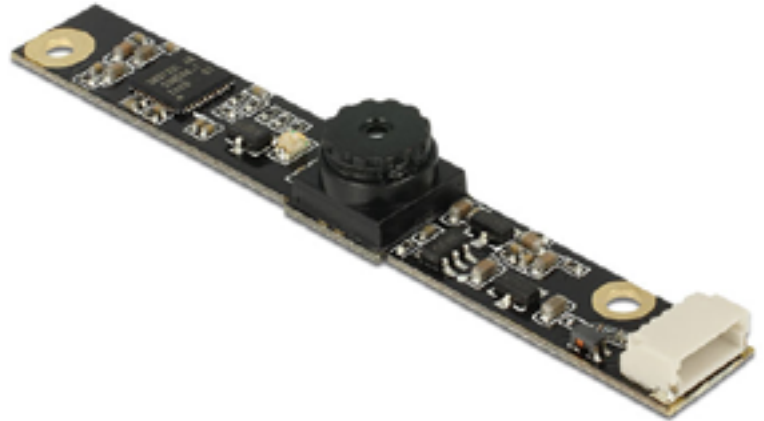
Delock USB 2.0 IR Camera Module 5.04 mega pixel 55° V5 fix focus

**Without optical IR filter**

96369

# Camera Module

## Delock USB 2.0 Camera Module



- Connector: USB 2.0 5 pin jack SMT, 1 mm pitch
- Resolution: 3.14 Mega Pixel
- Standard SCCB interface (I<sup>2</sup>C Bus)
- Output support for RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422 and compression
- Maximum resolution: QXGA (2048 x 1536)
- Automatic image control functions including
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLC)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling, noise canceling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Sensor suspend: 90 mA
  - Sensor active: 430 mA ± 5 mA @ 640 x 480 pixel
- Operating voltage: 5 V DC
- Operating temperature: 5 °C ~ 50 °C
- Relative humidity during operation: max. 80 %
- Sensor size: 1/4 inch
- Sensitivity: 0.6 V (lx s)
- Signal to noise ratio: 36 dB
- Dynamic range: 68 dB
- Fix focus: 0.3 m ~ infinite
- Lens: F/2.8
- Frame rates:
  - 30 fps @ HVGA, VGA, XGA, 720p, QVGA
  - 15 fps @ UXGA, 1080p, QXGA
- Dimension (LxWxH): ca. 60 x 8 x 6.3 mm
- System requirements:
  - PC with UVC support
  - Windows Vista/ 7/ 8/ 10
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM



Delock USB 2.0 Camera Module 3.14 mega pixel 48° V5 fix focus

**With optical IR filter**

95976



Delock USB 2.0 IR Camera Module 3.14 mega pixel 48° V5 fix focus

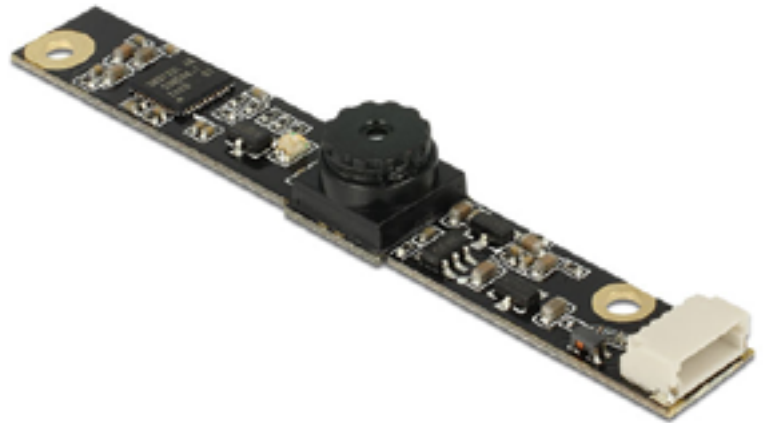
**Without optical IR filter**

95980



# Camera Module

## Delock USB 2.0 Camera Module



- Connector: USB 2.0 5 pin jack SMT, 1 mm pitch
- Resolution: 5.04 Mega Pixel
- Standard SCCB interface (I<sup>2</sup>C Bus)
- Output support for RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422 and compression
- Maximum resolution: QSXGA (2592 x 1944)
- Automatic image control functions including
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLC)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling, noise canceling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Sensor suspend: 90 mA
  - Sensor active: 140 mA ± 5 mA @ 640 x 480 pixel
- Operating voltage: 5 V DC
- Operating temperature: 5 °C ~ 50 °C
- Relative humidity during operation: max. 80 %
- Sensor size: 1/4 inch
- Sensitivity: 0.6 V (lx s)
- Signal to noise ratio: 36 dB
- Dynamic range: 68 dB
- Fix focus: 0.3 m ~ infinite
- Lens: F/2.8
- Frame rates:
  - 30 fps @ HVGA, VGA, XGA, 720p, QVGA
  - 15 fps @ UXGA, 1080p, QXGA
  - 7 fps @ 2592 x 1944
- Dimension (LxWxH): ca. 60 x 8 x 6.3 mm
- System requirements:
  - PC with UVC support
  - Windows Vista/ 7/ 8/ 10
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM



Delock USB 2.0 Camera Module 5.04 mega pixel 48° V5 fix focus

**With optical IR filter**

96372



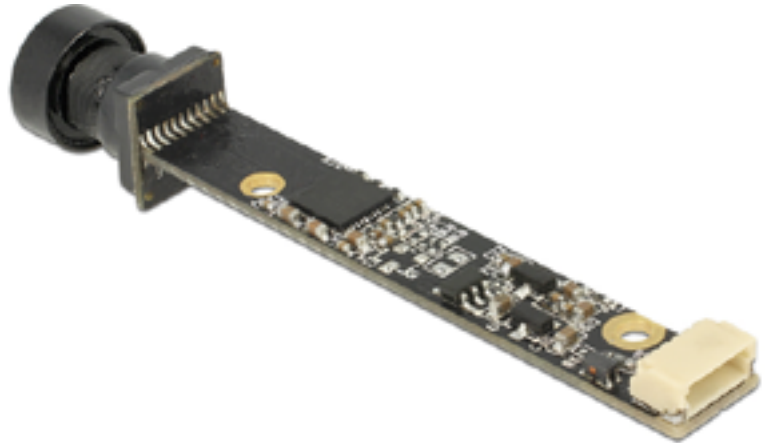
Delock USB 2.0 IR Camera Module 5.04 mega pixel 48° V5 fix focus

**Without optical IR filter**

96371

# Camera Module

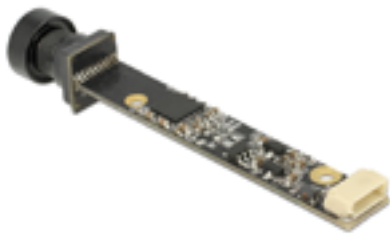
## Delock USB 2.0 Camera Module



- Connector: USB 2.0 5 pin jack SMT, 1 mm pitch
- Resolution: 5.04 megapixel
- With optical IR filter
- Supported formats: MJPG (compressed) YUYV: YUV 4:2:2
- Maximum resolution: QSXGA (2592 x 1944)
- Automatic image control functions including
  - Automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLCL)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling,

- noise canceling, and automatic 50/60 Hz luminance detection
- Supports scaling
- Power consumption: Sensor suspend: 90 mA Sensor active: 140 mA  $\pm$  5 mA @ 640 x 480 pixel
- Operating voltage: 5 V DC
- Operating temperature: 5 °C ~ 50 °C
- Relative humidity during operation: max. 80 %
- Sensor size: 1/4 inch
- Sensitivity: 0.6 V (lx s)
- Signal to noise ratio: 36 dB
- Dynamic range: 68 dB
- Fix focus: 0.3 m ~ infinite
- Lens: F/2.9

- Frame rates: 30 fps @ HVGA, VGA, XGA, 720p, QVGA 15 fps @ UXGA, 1080p, QXGA 7 fps @ 2592 x 1944
- Dimension (LxWxH): ca. 61.5 x 8.0 x 12.0 mm
- System requirements:
  - PC with UVC support
  - Windows 7 / 7-64 / 8.1 / 8.1-64 / 10 / 10-64
  - DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum CPU P4 1.4 GHz, 512 MB RAM



Delock USB 2.0 Camera Module 5.04 mega pixel 80° V5 fix focus

**Lens side facing**

**with optical IR filter**

96382



Delock USB 2.0 Camera Module 5.04 mega pixel 55° V5 fix focus

**Lens side facing**

**with optical IR filter**

96383



# Camera Module

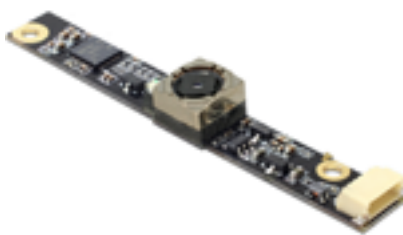
## Delock USB 2.0 Camera Module



- USB 2.0 high speed
- 3.14 Mega Pixel
- Standard SCCB interface (I<sup>2</sup>C Bus)
- Output support for RAW RGB, GB565/555/444, CCIR656, YUV422/420, YCbCr422 and compression
- Supports resolutions: QXGA (2048 x 1536)
- Different fully-automated shutter priority:
  - Automatic image control functions including automatic exposure control (AEC)
  - Automatic white balance (AWB)
  - Automatic band filter (ABF)
  - Automatic black-level calibration (ABLC)
- Image quality controls including colour saturation, gamma, sharpness (edge enhancement),

- lens correction, white pixel canceling, noise canceling, and autom. 50/60 Hz luminance detection
- Supports scaling
- Power consumption:
  - Sensor suspend: 90 mA
  - Sensor active: 140 mA ± 5 mA @ 640x480
- Low operating voltage 5 V
- Operating temperature: 5 ~ 40 °C
- Relative humidity during operation: max. 20 – 80 %
- Lense dimension: 1/4 inch
- Sensitivity: 0.6 V (Lux. sec)
- Signal-to-noise ratio: 36 dB
- Dynamic range: 68 dB
- Auto focus
- Lense: F/2.8

- Frame rates:
  - 30fps @ HVGA, VGA, XGA, 720p, QVGA
  - 15fps @ UXGA, 1080p, QXGA
- Dimension (LxWxH): 60 x 8 x 5.8 mm
- System requirements:
  - Win Vista/ 7/ 8,
  - MS DirectX 9.0c and above
  - Linux 2.6.15 and above with Video4Linux
  - Minimum P4 1.4 GHz, 128 MB RAM



Delock USB 2.0 Camera Module 3.14 mega pixel 62° auto focus

**3.14 Mega Pixel**

**PC with UVC support**

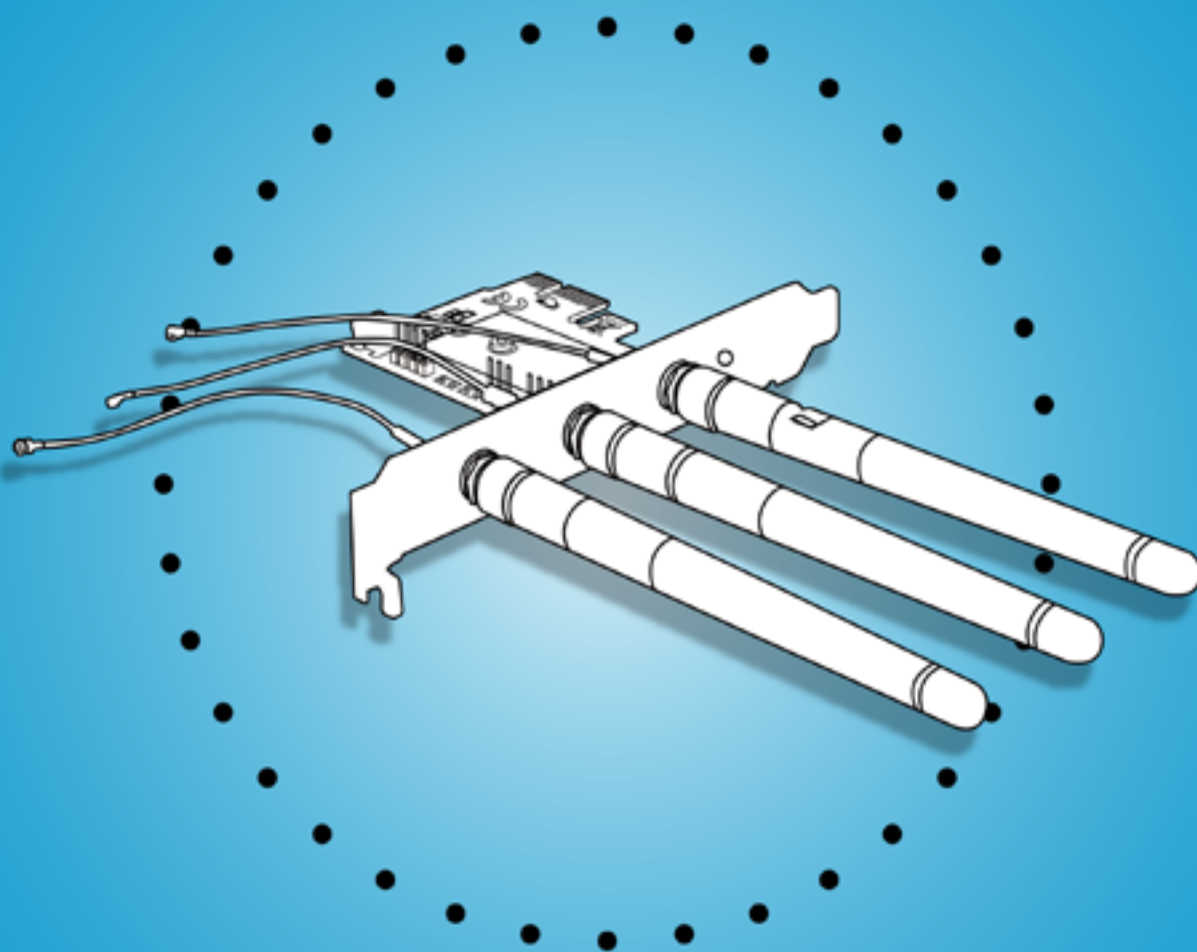
95999



Delock USB 2.0 Camera Module 5.04 mega pixel 62° auto focus

**5.04 Mega Pixel**

96000

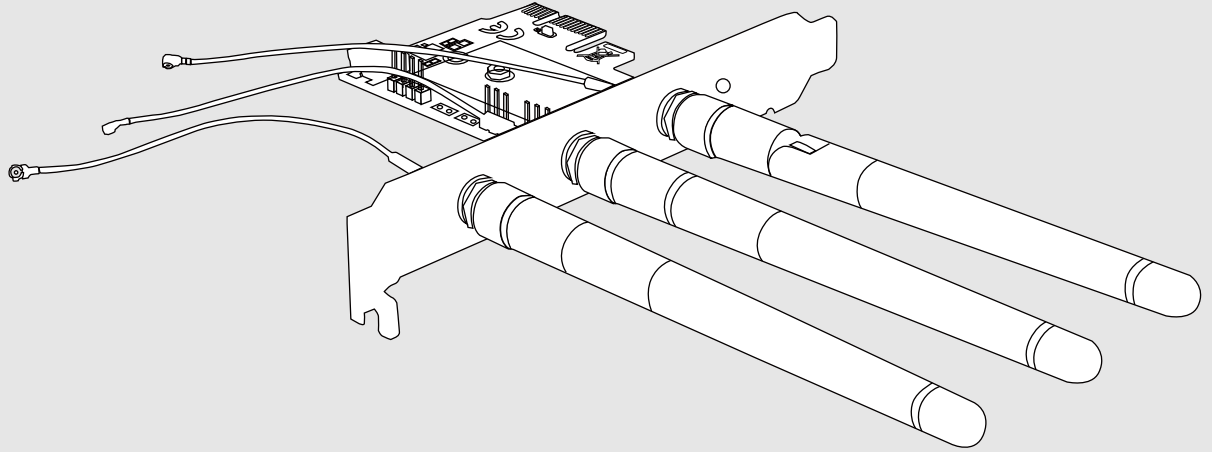


# Antenna IO card

[www.delock.de](http://www.delock.de)

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# Antenna IO card



## Delock PCI Express Card >

### 1 x internal M.2 Key A Slot with 3 external Antennas – Low Profile Form Factor

89568



**Connectors:**

- 1 x 67 pin M.2 key A slot
- 1 x PCI Express x1
- 1 x USB 2.0 Type Mini-B female (for M.2 USB modules)
- 1 x USB 2.0 pin header male (for M.2 USB modules)
- 3 x MHF plug (antenna cable)
- Interface: PCIe + USB
- Suitable for M.2 modules in format: 3042, 3030, 2242 and 2230 with key A or key A+E based on PCIe and USB

- Maximum height of the components on the module: 1.5 mm, application of double-sided assembled modules supported
- Antenna
  - Gain: 2 dBi
  - Frequency range: 2.4 GHz and 5 GHz
  - Impedance: 50 Ohm
  - VSWR: 2.0
  - Polarisation: linear
- 2 x jumper for activating / deactivating the USB / PCIe signals

- 2 x LED indicator
- Each slot bracket with 3 x hole for antenna connector
- OS independent, no driver installation necessary
- System requirements:
  - PC with one free PCI Express slot

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we move the world



# Displayport Adapter

[www.delock.de](http://www.delock.de)

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# DisplayPort adapter



DisplayPort female to DisplayPort female 90° angle  
21362



DisplayPort female to DisplayPort female 180°  
21363



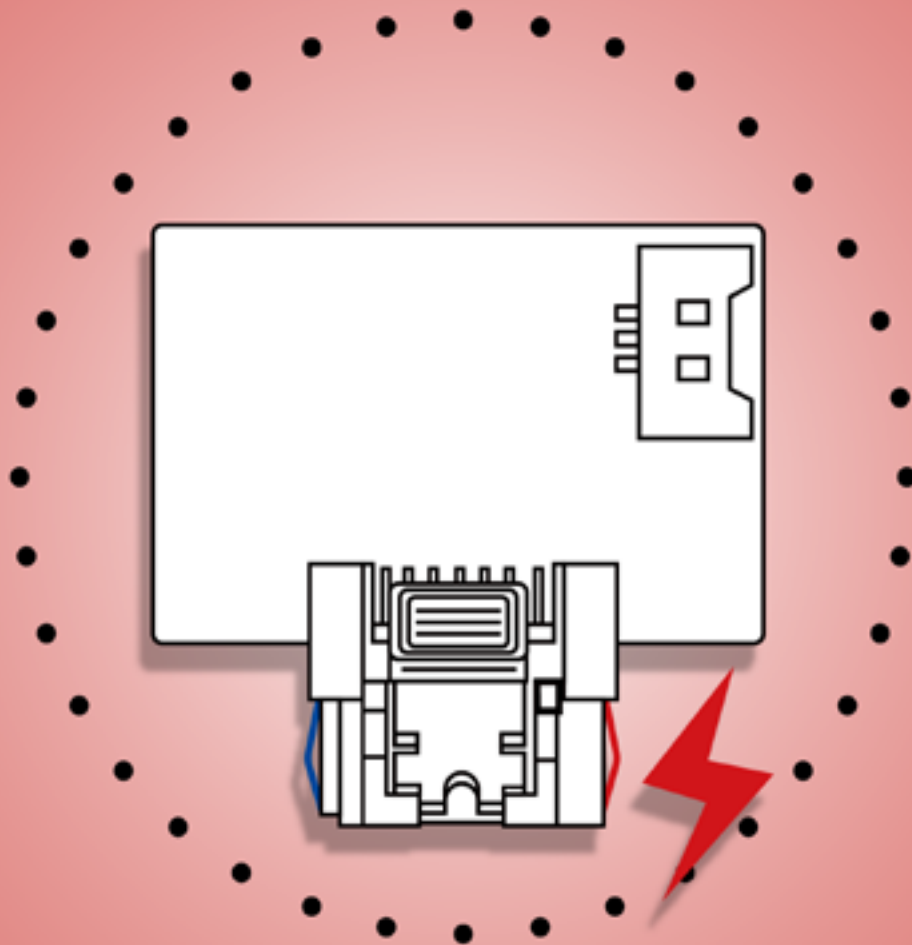
HDMI female to HDMI female 90° angle  
21364



HDMI female to HDMI female 180°  
21365



DisplayPort male to DisplayPort female with 20 pin power input  
21366



# SATA 8 Pin Power

[www.delock.de](http://www.delock.de)

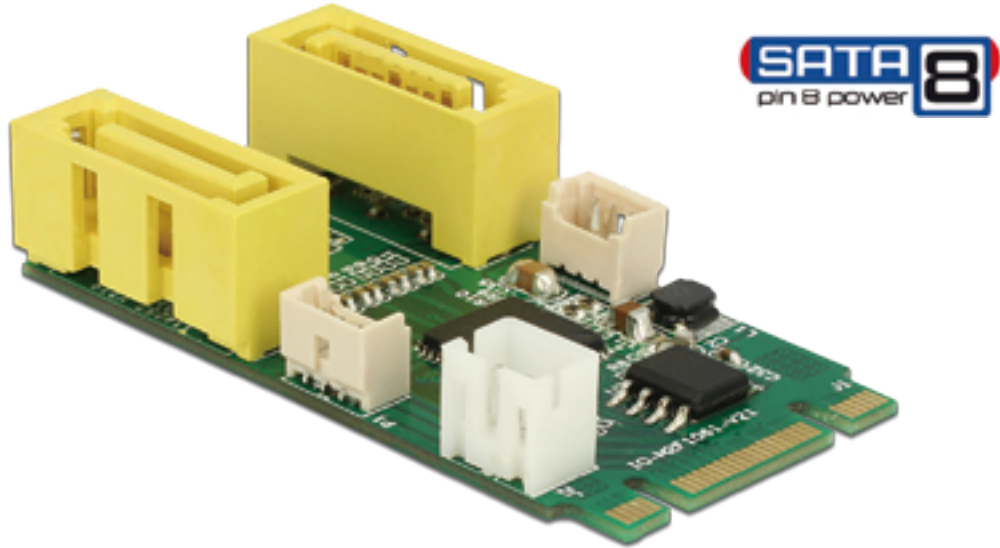
---

# Converter M.2 Key B+M > 2 x SATA 8 pin power

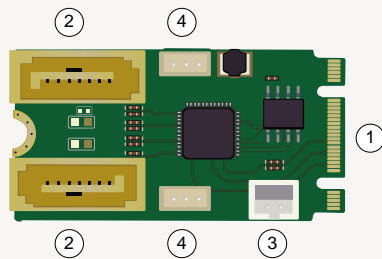
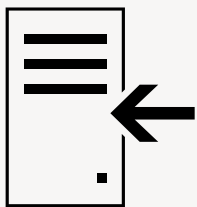
Form factor: M.2 2242

Expands the system by two SATA 8 pin power ports

**PCIe 2.0**



CE FC



- ① 1 x 59 pin M.2 key B+M male
- ② 2 x SATA 6 Gb/s plug 8 pin power with latchtype
- ③ 1 x 2 pin power connector
- ④ 2 x 3 pin power connector

**Windows**  
7/7-64/8.1/8.1-64/  
10/10-64

**Linux**  
ex Kernel 4.9.4

transfer rate up to  
6 Gb/s

Voltage  
5 V

Form factor  
M.2 NGFF 2242

Interface  
PCIe 2.0



# Converter SATA plug pin 8 power > M.2 key B slot

Downwards compatible to SATA 1.5 Gb/s and 3 Gb/s

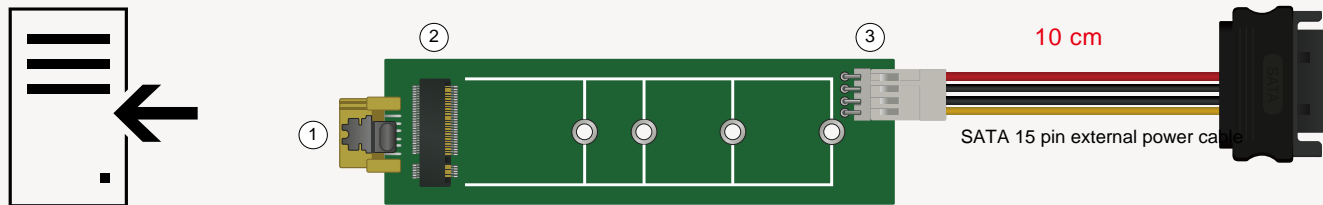
A free SATA pin8 receptacle on the motherboard

Or a free SATA 7 pin receptacle on motherboard + SATA 15 pin external power

**SATA 6 Gb/s**



CE FC



- ① 1 x SATA 6 Gb/s plug 8 pin power with latchtype
- ② 1 x M.2 key B slot
- ③ 1 x Floppy power 4 pin male



transfer rate up to  
6 Gb/s



Voltage  
5 V



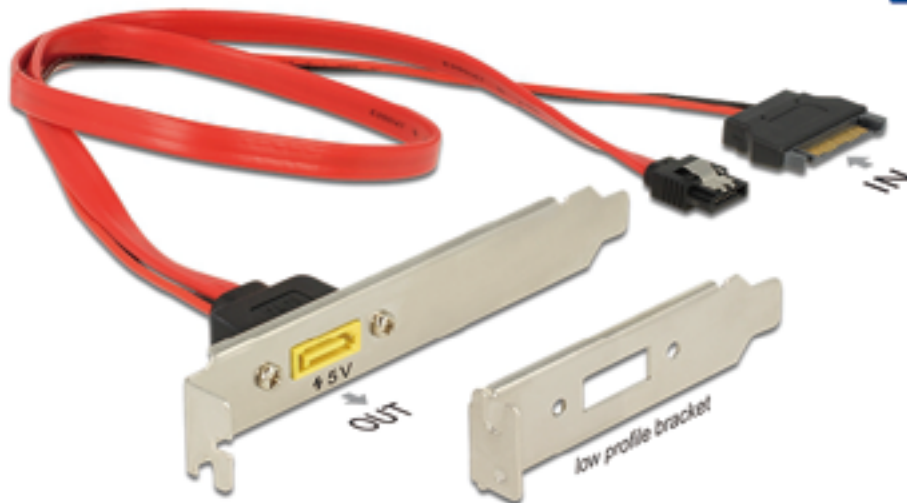
gauge (grand line)  
24 AWG



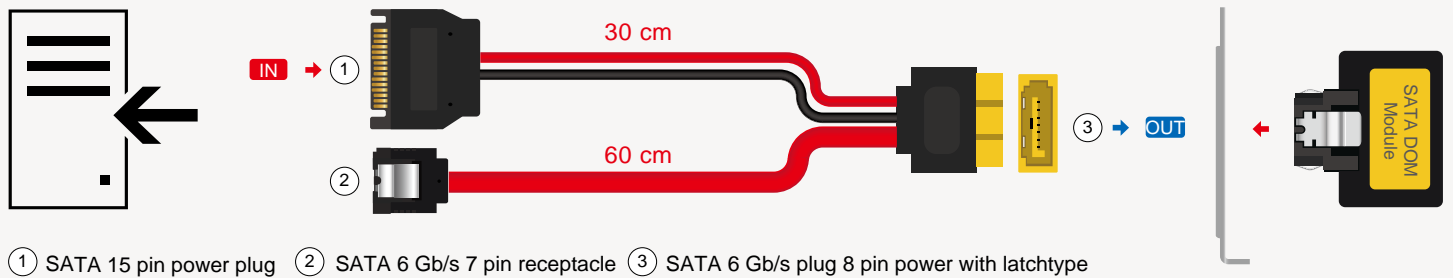
gauge (power line)  
24 AWG

# SATA 6 Gb/s 7 pin receptacle + SATA 15 pin power plug internal > SATA male 8 pin power external

E.g. for SATA DOM memories (e.g. for Delock item 54776)  
Downwards compatible to SATA 1.5 Gb/s and 3 Gb/s



CE FC



transfer rate up to  
6 Gb/s



Voltage  
5 V



gauge(data line)  
26 AWG



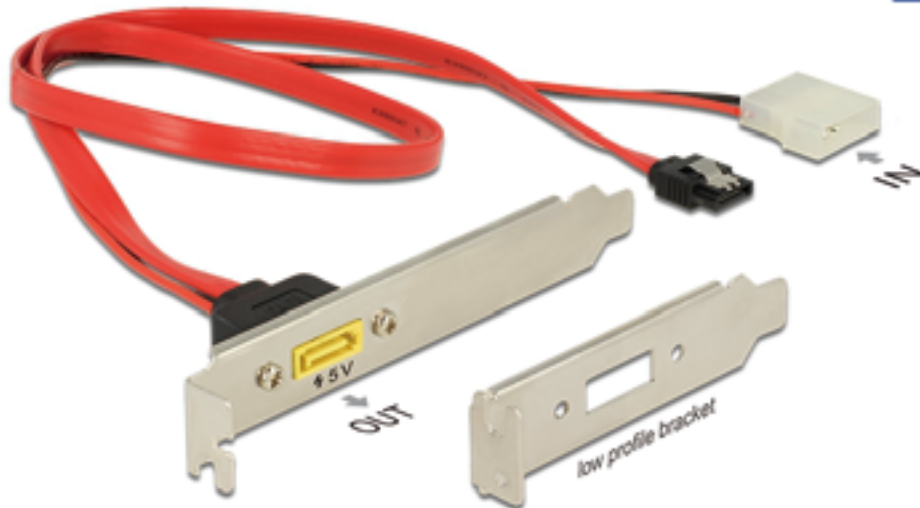
gauge(power line)  
18 AWG



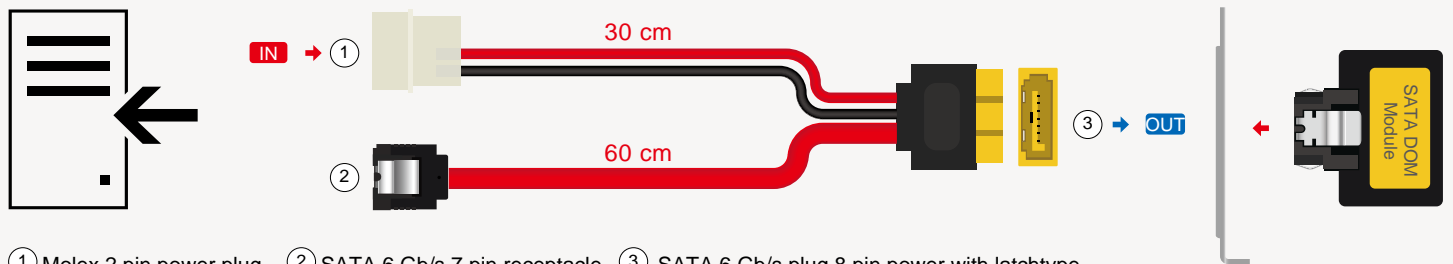
diameter  
2.2 mm

# SATA 6 Gb/s 7 pin receptacle + Molex 2 pin power plug internal > SATA male 8 pin power external

E.g. for SATA DOM memories (e.g. for Delock item 54776)  
Downwards compatible to SATA 1.5 Gb/s and 3 Gb/s



CE FC



① Molex 2 pin power plug ② SATA 6 Gb/s 7 pin receptacle ③ SATA 6 Gb/s plug 8 pin power with latchtype



transfer rate up to  
6 Gb/s



Voltage  
5 V



gauge(data line)  
26 AWG



gauge(power line)  
18 AWG



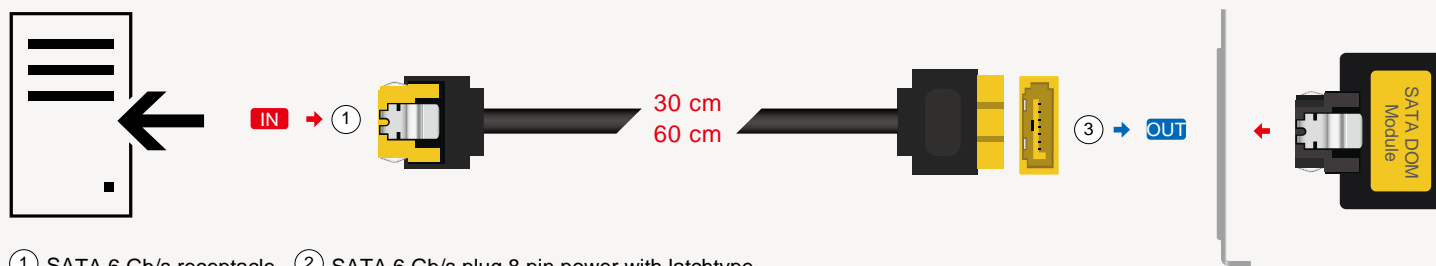
diameter  
2.2 mm

# SATA 6 Gb/s receptacle internal > SATA male 8 pin power external

E.g. for SATA DOM memories (e.g. for Delock item 54776)  
Downwards compatible to SATA 1.5 Gb/s and 3 Gb/s



84952 | 30 cm  
84950 | 60 cm



transfer rate up to  
6 Gb/s



Voltage  
5 V



gauge(data line)  
30 AWG

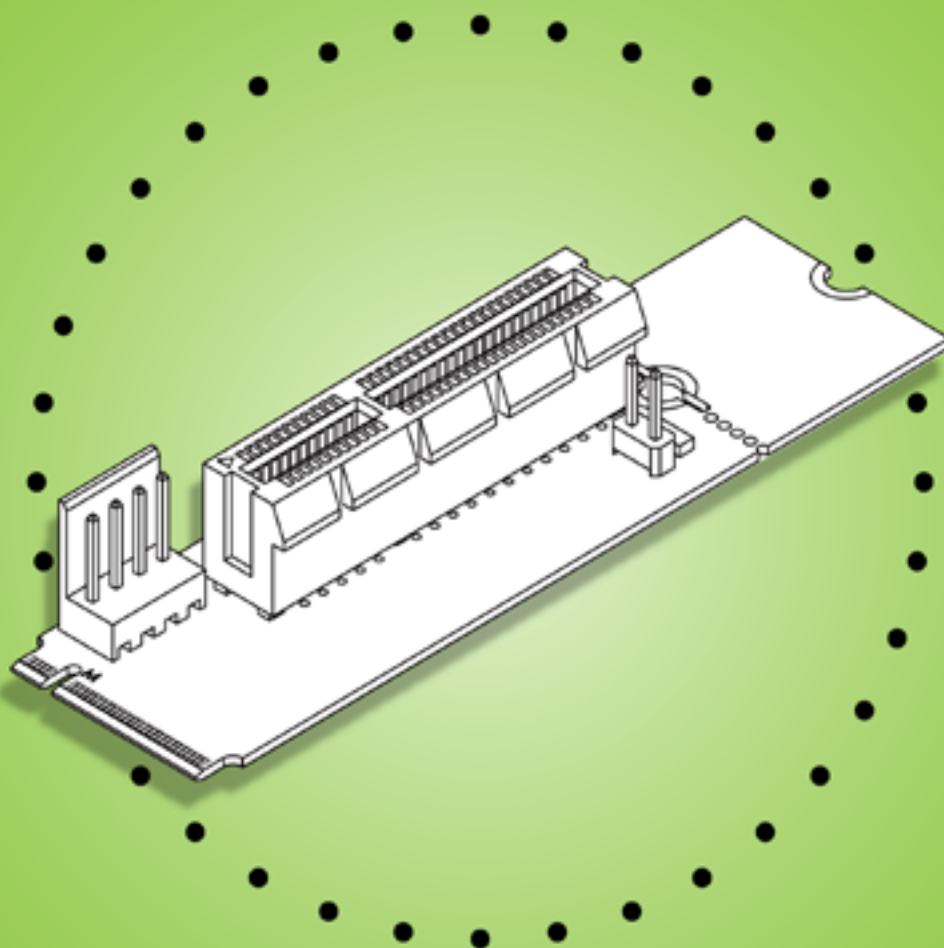


gauge(power line)  
24 AWG



diameter  
5.8 mm

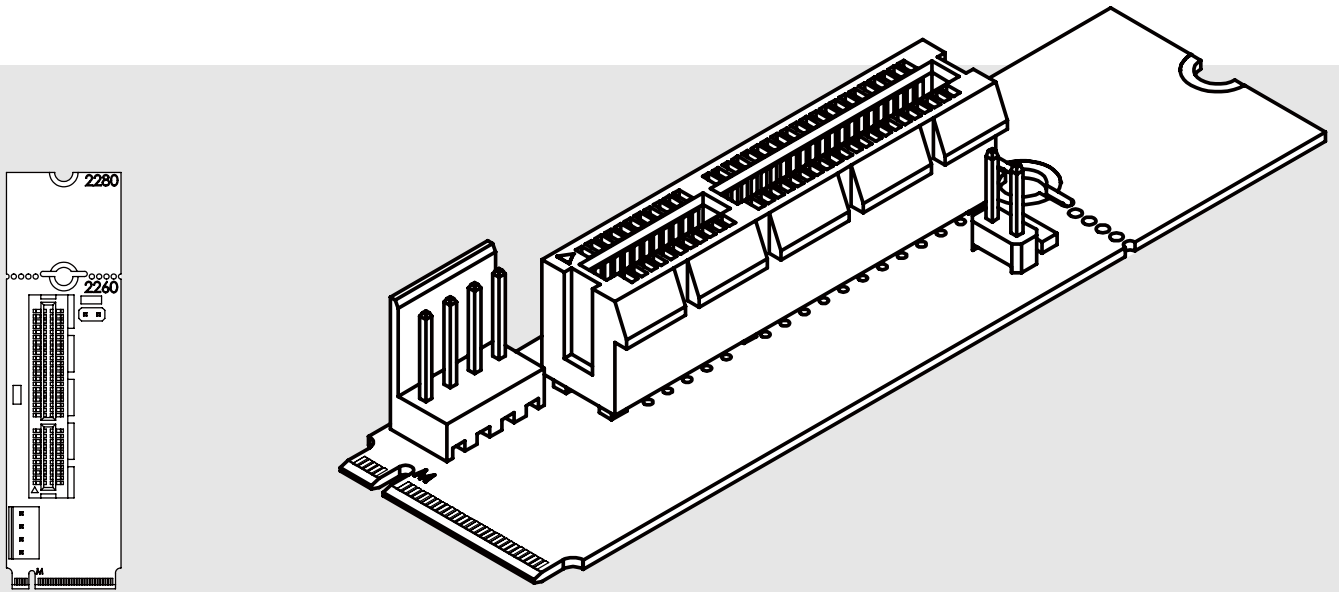
**DEL**OCK®  
we move the world



**M.2 NGFF**  
[www.delock.de](http://www.delock.de)

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# M.2 NGFF



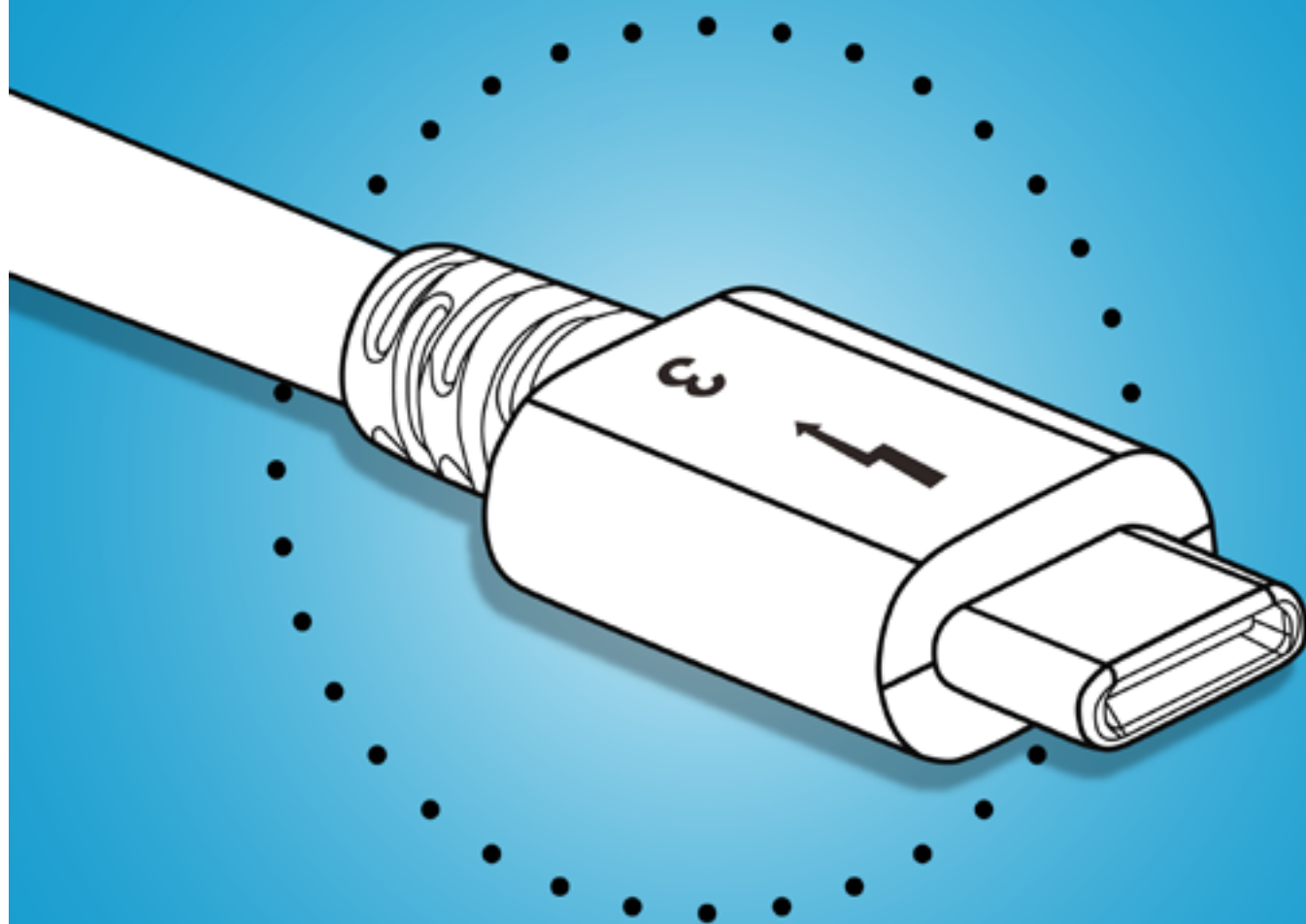
## Delock Adapter M.2 Key M male > PCI Express x4 Slot

62584



- Connectors:
  - 1 x 67 pin M.2 Key M male
  - 1 x PCI Express x4 slot, rev. 2.0
  - 1 x 4 pin power connector
- Interface: PCIe
- Form factor: 2280 or 2260
- Suitable for M.2 slot with key M based on PCIe
- OS independent, no driver installation necessary

**DELLOCK**  
we move the world



**Thunderbolt™**  
[www.delock.de](http://www.delock.de)



# Thunderbolt™ 3 External Portable SSD

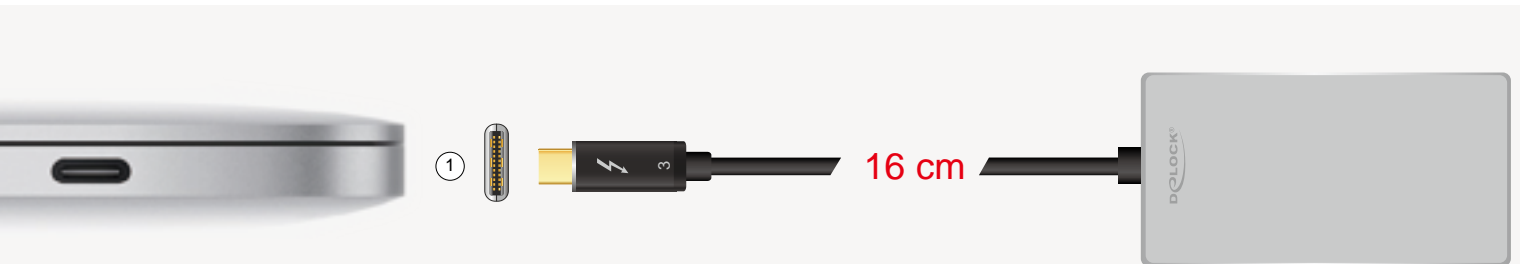
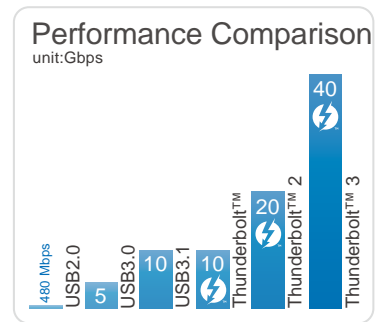
Connect the M.2 SSD  
to a free Thunderbolt™ 3 port

**NVMe**



54000 | 240 GB  
54007 | 480 GB

CE FC



① Thunderbolt™ 3 USB Type-C™ 24 pin male

LxWxH: ca. 108 x 65 x 14 mm

  
**Windows**  
7/7-64/8.1/8.1-64  
10/10-64

  
**Mac OS**  
ex 10.12

  
**Linux**  
ex Kernel 4.3.3  
Kernel 4.9.1

  
**WRITE**  
Maximum speed  
2300 MB/S

  
**READ**  
Maximum speed  
2800 MB/S

  
**Power consumption**  
6W

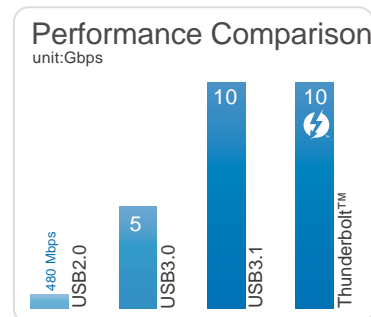
  
**MTBF**  
2,000,000 hours

# Thunderbolt™ Adapter > USB 3.0 Type-A female + SD UHS-II Card Reader

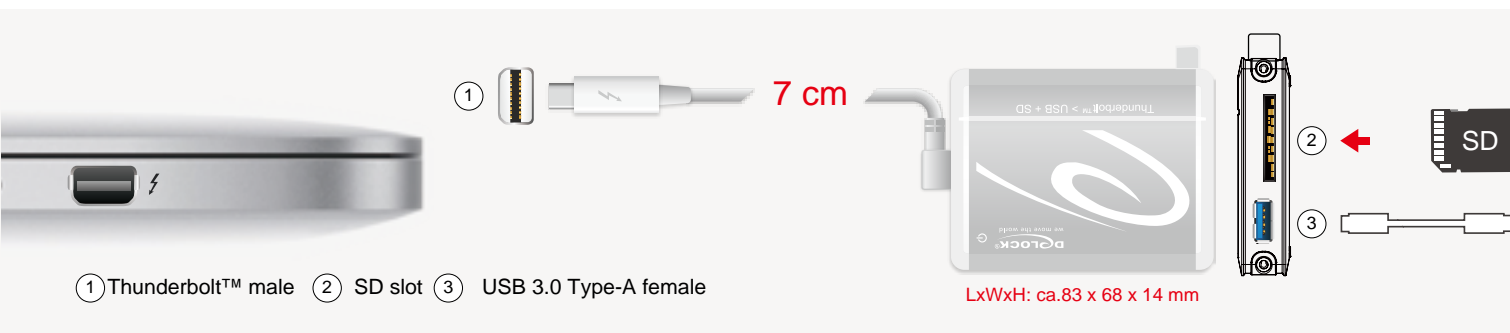
Chipset: Asmedia + Realtek  
Supports SD UHS-II memory cards

**1 x SD 4.0 UHS-II slot**

**1 x USB Type-A 3.0 Port**



CE FC



**Windows**  
7/7-64/  
8/8-64/8.1/8.1-64/  
10/10-64

**Mac OS**  
10.9

**WRITE**  
SD write up to  
260 MB/S

**READ**  
SD read up to  
200 MB/S

**POWER**  
USB bus powered  
max. 900 mA

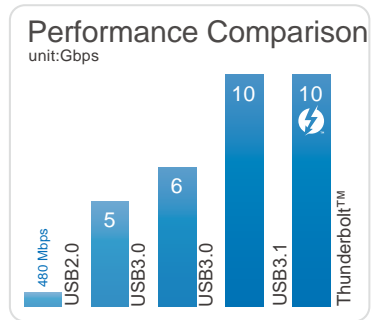
**Current consumption**  
1.8A (5V)

**Hot Swap**  
Plug & Play

# 2.5" External Enclosure SATA HDD > Thunderbolt™ (up to 15 mm HDD)

Chipset: Asmedia

**black**



CE FC



**Windows**  
7/7-64/  
8/8-64/8.1/8.1-64/  
10/10-64

**Mac OS**  
10.7, 10.8

**DATA**  
transfer rate up to  
6 Gb/s

**POWER**  
self-powered  
12 V / 2.5 A

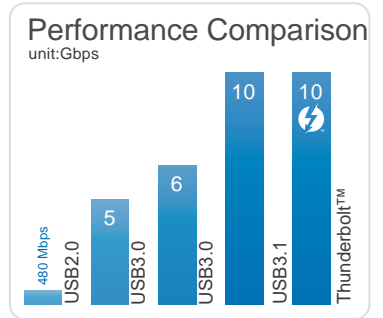
**LED indicator for power & access**

**Hot Swap Plug & Play**

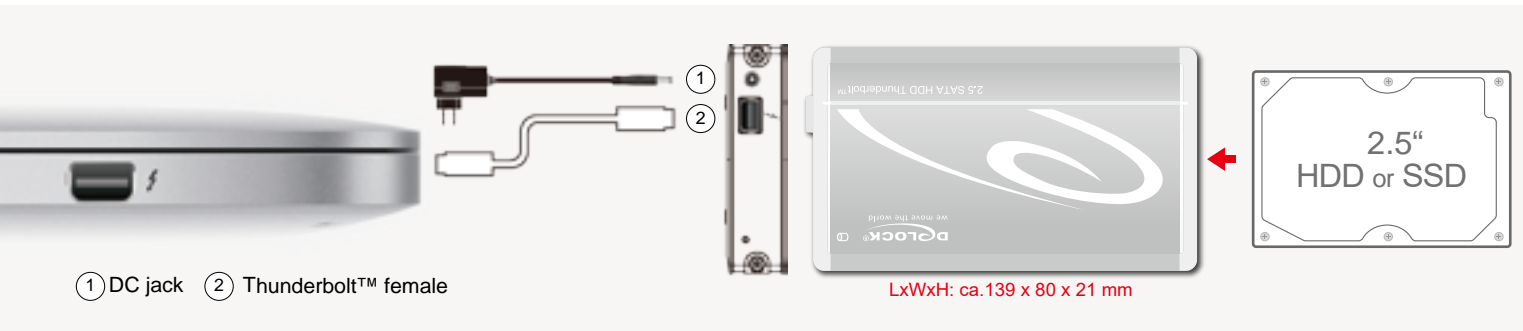
# 2.5" External Enclosure SATA HDD > Thunderbolt™ (up to 15 mm HDD)

Chipset: Asmedia

**Silver**



CE FC



**Windows**  
7/7-64/  
8/8-64/8.1/8.1-64/  
10/10-64

**Mac OS**  
10.7, 10.8

**DATA**  
transfer rate up to  
6 Gb/s

**POWER**  
self-powered  
12 V / 2.5 A

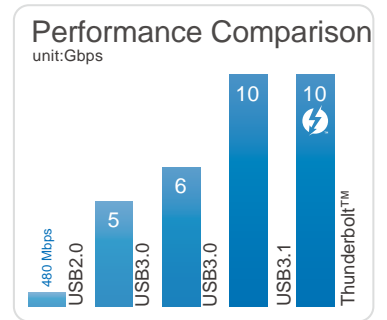
**LED indicator for power & access**

**Hot Swap Plug & Play**

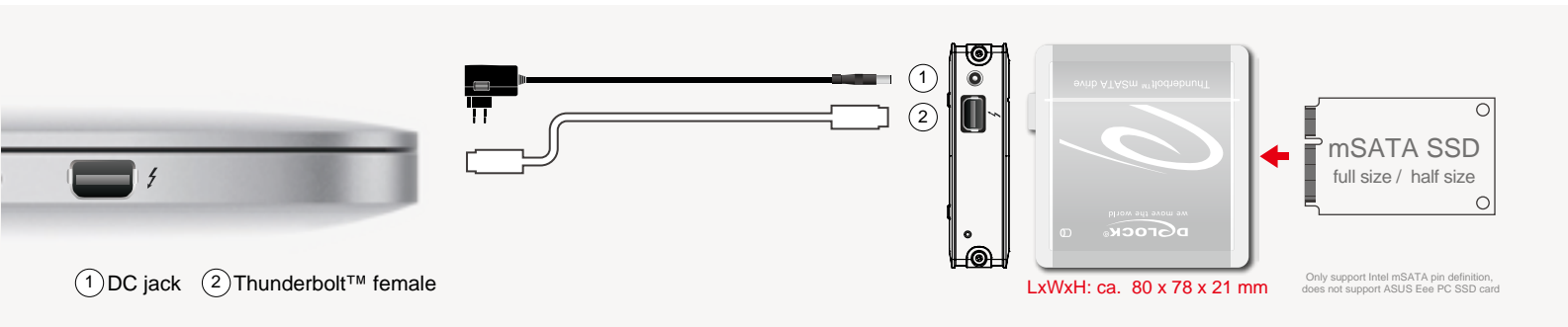
# External Enclosure Thunderbolt™ > mSATA SSD

Chipset: Asmedia

**Silver**



CE FC



**Windows**  
7/7-64/  
8/8-64/8.1/8.1-64

**Mac OS**  
10.7, 10.8

**DATA**  
transfer rate up to  
6 Gb/s

**POWER**  
self-powered  
12 V / 2.5 A

**LED indicator for  
power & access**

**Operating temperature**  
5 °C ~ 35 °C

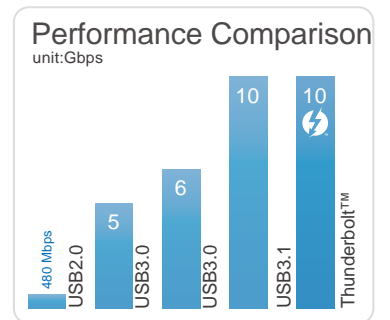
**Storage temperature**  
-20 °C ~ +70 °C

**Hot Swap  
Plug & Play**

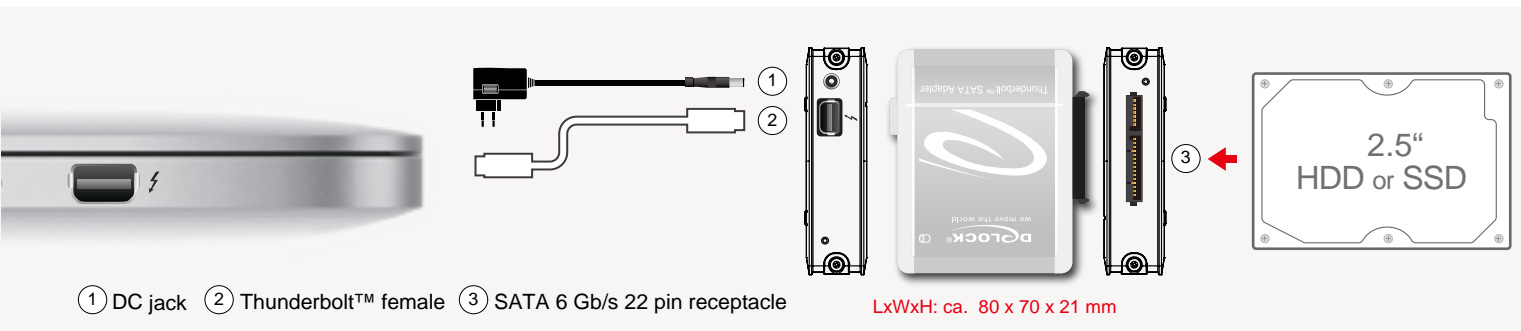
# Converter Thunderbolt™ > SATA 6 Gb/s

Chipset: Asmedia  
SATA 6 Gb/s 22 pin interface

**Silver**



CE FC



**Windows**  
7/7-64/  
8/8-64/8.1/8.1-64

**Mac OS**  
10.7, 10.8, 10.9.5

**DATA**  
transfer rate up to  
6 Gb/s

**POWER**  
self-powered  
12 V / 2.5 A

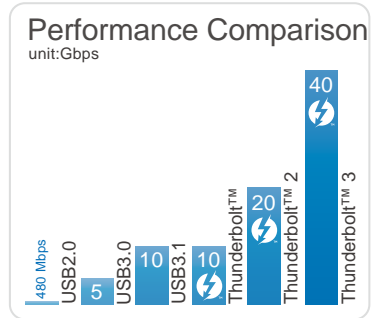
**LED indicator for  
power & access**

# Adapter Thunderbolt™ 3 male > 2 x HDMI female

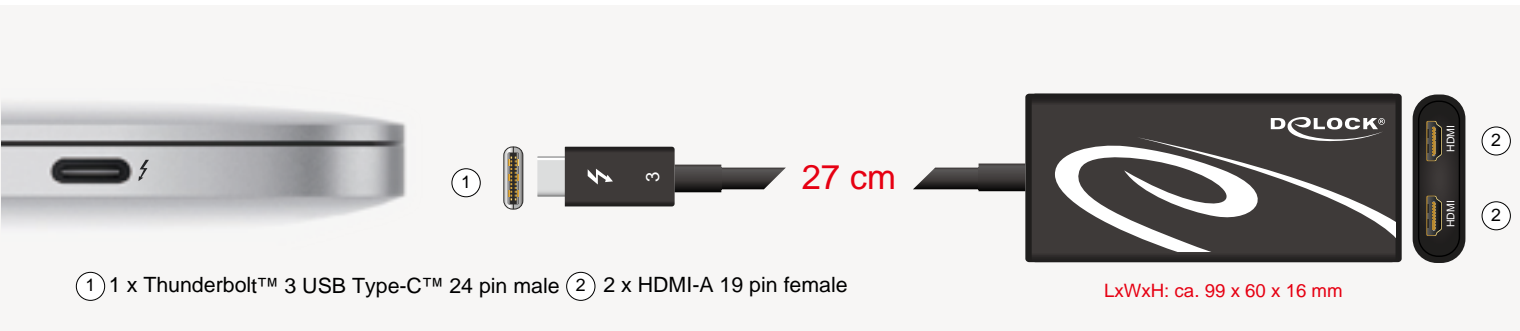
Thunderbolt™ 3 and High Speed HDMI with Ethernet (HEC) specification  
Transfer of audio and video signals

**4K 30Hz**

**black**



CE FC



**Windows**  
7/7-64/8.1/8.1-64/  
10/10-64

**Mac OS**  
ex 10.12

**DATA**  
transfer rate up to  
40 Gb/s

**Resolution up to**  
2560 x 1440 @ 60 Hz

**bus powered**  
Thunderbolt™ 3

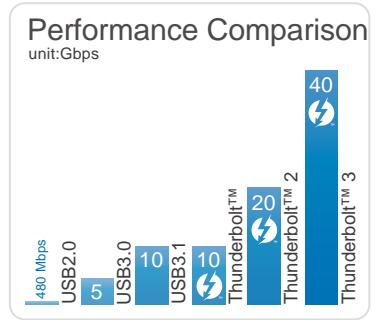
**Hot Swap**  
Plug & Play



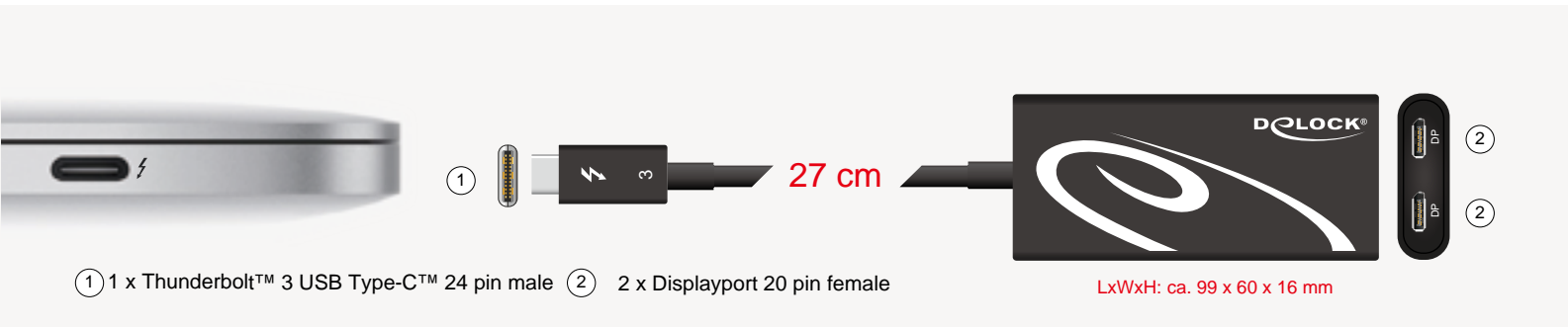
# Adapter Thunderbolt™ 3 male > 2 x Displayport female

Thunderbolt™ 3 and Displayport 1.2 specification  
Transfer of audio and video signals

**4K 60Hz**  
**black**



CE FC



**Windows**  
7/7-64/8.1/8.1-64/  
10/10-64

**Mac OS**  
ex 10.12

**DATA**  
transfer rate up to  
40 Gb/s

**Resolution up to**  
4090 x 2106 @ 60 Hz

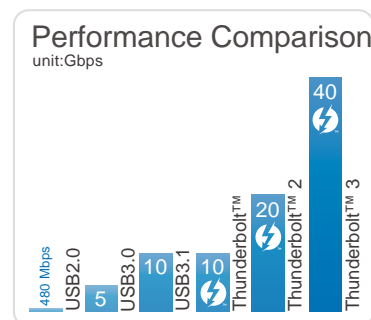
**bus powered**  
Thunderbolt™ 3

**Hot Swap**  
Plug & Play

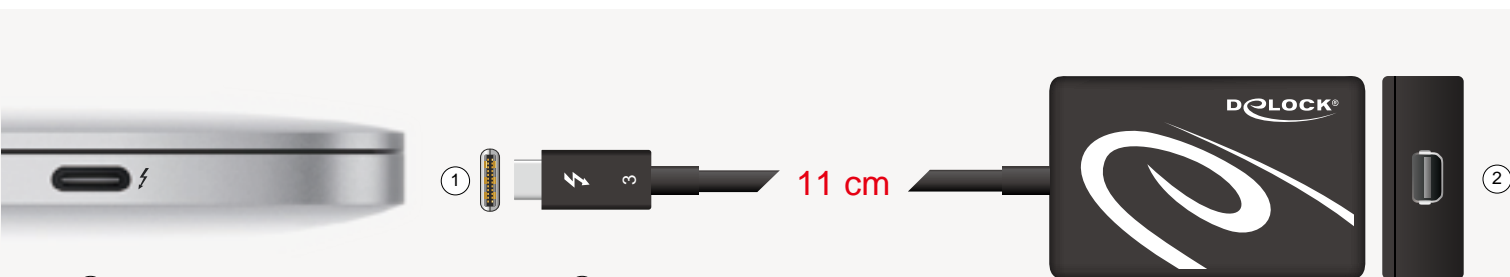
# Adapter Thunderbolt™ 3 male > Thunderbolt™ female

To connect Thunderbolt™ devices to the new Thunderbolt™ 3 USB Type-C™ interface

**black**



CE FC



① 1 x Thunderbolt™ 3 USB Type-C™ 24 pin male ② 1 x Thunderbolt™ 2 20 pin female

LxWxH: ca. 88.7 x 58.4 x 16.5 mm

**Windows**  
7/7-64/8.1/8.1-64/  
10/10-64

**Mac OS**  
10.12.1

**Linux**  
ex Kernel 3.17 /  
Kernel 4.x.x

**DATA**  
transfer rate up to  
20 Gb/s

**bus powered  
Thunderbolt™ 3**

**Hot Swap  
Plug & Play**

# Cable Thunderbolt™ 2 male > Thunderbolt™ 2 male

Chipset: Intel

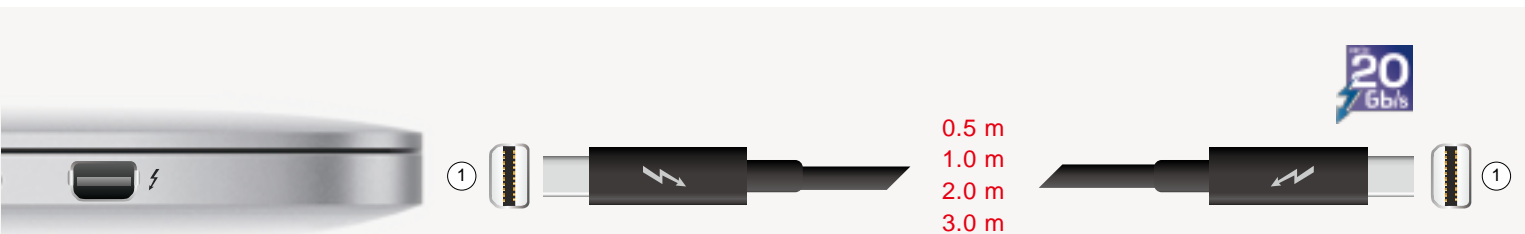
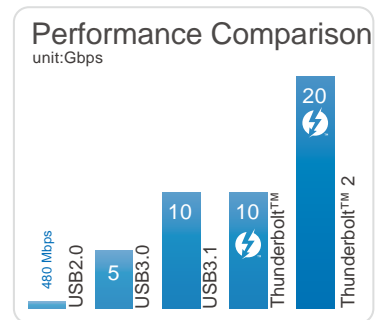
Supports data and video on a single cable

**black**



- 83154 | 0.5 m
- 83149 | 1.0 m
- 83150 | 2.0 m
- 83151 | 3.0 m

CE FC



① 2 x Thunderbolt™2 male



gauge  
34 AWG



diameter  
4.2 mm



Copper cable



transfer rate up to  
20 Gb/s



based on  
PCIe & DP



Daisy Chain up to  
6 devices



data transfer  
bi-directional

# Cable Thunderbolt™ 2 male > Thunderbolt™ 2 male

Chipset: Intel

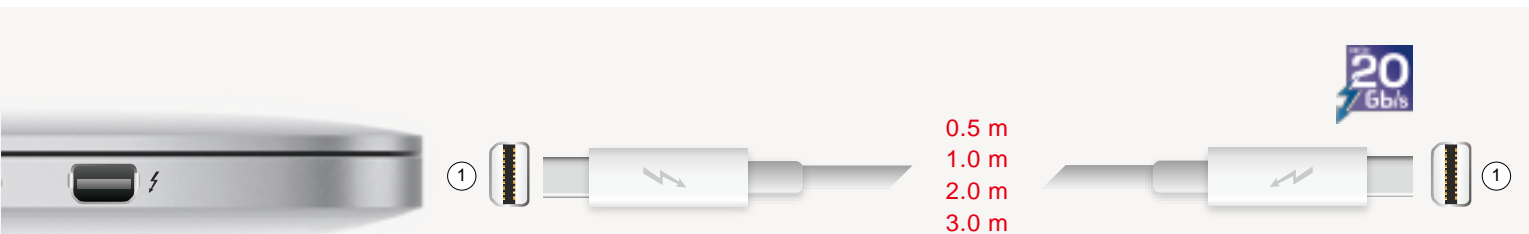
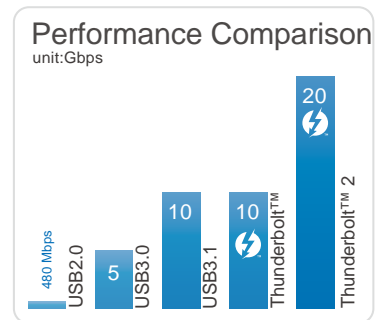
Supports data and video on a single cable

**white**



- 83165 | 0.5 m
- 83166 | 1.0 m
- 83167 | 2.0 m
- 83168 | 3.0 m

CE FC



① 2 x Thunderbolt™2 male



gauge  
34 AWG



diameter  
4.2 mm



Copper cable



transfer rate up to  
20 Gb/s



based on  
PCIe & DP



Daisy Chain up to  
6 devices



data transfer  
bi-directional

# Thunderbolt™ 3 USB-C™ cable male > male

Chipset: Cypress E-Marker

Conductors: 8 x coaxial for SuperSpeed USB, 1 x Twisted Pair for USB 2.0

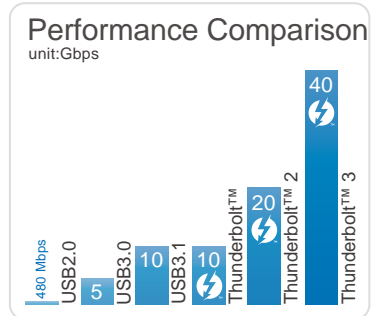
Supports data and video on a single cable

**passive**

**black**



- 84844 | 0.5 m
- 84845 | 1.0 m
- 84846 | 1.5 m
- 84847 | 2.0 m



① 2 x Thunderbolt™ 3 USB Type-C™ male

Item No.	Length	Diameter	Gauge (data line)	Gauge (power line)	Data transfer rate up to	Delivery up to
84844	0.5 m	4.4 mm	32 + 34 AWG	24 + 34 AWG	40 Gb/s	100 W (20 V / 5 A)
84845	1.0 m	4.4 mm	32 + 34 AWG	24 + 34 AWG	20 Gb/s	100 W (20 V / 5 A)
84846	1.5 m	4.4 mm	32 + 34 AWG	24 + 34 AWG	20 Gb/s	100 W (20 V / 5 A)
84847	2.0 m	4.6 mm	32 + 34 AWG	24 + 34 AWG	20 Gb/s	60 W (20 V / 3 A)

**DELOCK®**  
we move the world



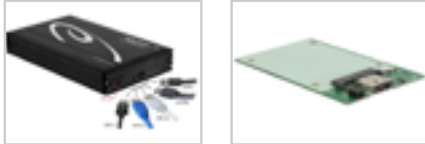
**eSATAp 3 in 1**

[www.delock.de](http://www.delock.de)

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# eSATAp 3 in 1 series

Delock 2.5" External Enclosure SATA HDD >  
Multiport SuperSpeed USB 10 Gbps (USB 3.1 Gen 2)



- Connector:  
external:  
1 x Multiport SuperSpeed USB 10 Gbps (USB 3.1 Gen 2) + eSATAp 6 Gb/s  
1 x DC for power when connecting via eSATA
- internal:  
1 x SATA 6 Gb/s 22 pin
- Suitable for 2.5" SATA HDD / SSD:  
SATA HDD / SSD up to 6 Gb/s  
HDD / SSD up to 3 TB  
supports 5 V HDD / SSD
- Chipset: Asmedia ASM1351 + ASM1456
- Data transfer rate:  
SuperSpeed USB 10 Gbps,  
SuperSpeed USB 5 Gbps,  
Hi-Speed 480 Mbps,
- Full-Speed 12 Mbps,  
Low-Speed 1.5 Mbps  
eSATA 6 Gbps
- Enclosure with full-PCB
- LED indicator for power
- Hot Swap, Plug & Play
- Specification of power connector:  
- 5 V, ground outside, plus inside
- Dimensions:  
inside: ø ca. 1.35 mm  
outside: ø ca. 3.5 mm  
length: ca. 8.5 mm
- Optional power supply: Navilock 41337
- System requirements:  
- Windows 7/7-64/8.1/8.1-64/10/10-64  
- PC or laptop with a free USB Type-C™ port



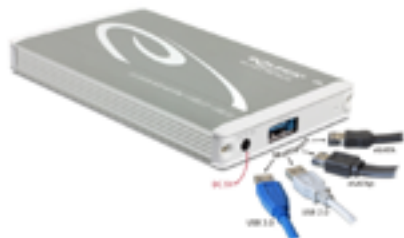
Delock 2.5" External Enclosure SATA HDD >  
Multiport SuperSpeed USB 10 Gbps (USB 3.1 Gen 2)

**HDD height up to 15 mm**

**black**

**ca. 136 x 80 x 21 mm**

42556



Delock 2.5" External Enclosure SATA HDD >  
Multiport SuperSpeed USB 10 Gbps (USB 3.1 Gen 2)

**HDD height up to 9.5 mm**

**silver**

**ca. 136 x 80 x 16 mm**

42554



# eSATAp 3 in 1 series

Delock External Enclosure mSATA SSD >  
Multiport USB 3.0 + eSATAp  
42508



**Connecting options:**

1. USB 3.0 (power via USB)
  2. USB 2.0 (power via USB)
  3. eSATAp (Power Over eSATA combo-connection eSATA+USB -eSATA for data and USB for power)
  4. eSATA (eSATA for data and power via included USB power cable)
- Connector:
- external:
- 1 x Multiport USB 3.0 + eSATAp 6 Gb/s female
  - 1 x DC for power when connecting via eSATA
- internal:

- 1 x mSATA slot (half size / full size)
- For mSATA memory 1.5 Gb/s, 3 Gb/s and 6 Gb/s SSD with half size or full size
- Data transfer rate:
  - USB 3.0 up to 5 Gb/s
  - USB 2.0 up to 480 Mb/s
  - eSATA up to 6 Gb/s
- Enclosure with full-PCB
- LED indicator for power
- Colour: black
- Dimensions (LxWxH): ca. 82.5 x 60 x 12 mm
- Hot Swap, Plug & Play
- Specification of power connector: - 5 V, ground outside, plus inside

- Dimensions:
  - inside:  $\varnothing$  ca. 1.3 mm
  - outside:  $\varnothing$  ca. 3.5 mm
  - length: ca. 9.5 mm
- Optional power supply: Navilock 41337
- System requirements:
  - Windows Vista/7/8/8-64/8.1/8.1-64/10/10-64, Linux Mint, Mac OS 10.8.2
  - PC or laptop with
    1. a free USB 3.0 port
    2. or a free USB 2.0 port
    3. or a free eSATAp port
    4. or a free eSATA port and a free USB port for power

# eSATAp 3 in 1 series

Delock External Enclosure mSATA SSD >  
Multiport SuperSpeed USB 10 Gbps (USB 3.1 Gen 2)  
42566



- Connector:
- external:
- 1 x Multiport SuperSpeed USB 10 Gbps (USB 3.1 Gen 2) + eSATAp 6 Gb/s
  - 1 x DC for power when connecting via eSATA
- internal:
- 1 x mSATA slot (half size / full size)
- For mSATA memory 1.5 Gb/s, 3 Gb/s and 6 Gb/s SSD with half size or full size
- Chipset: Asmedia ASM1351
- Data transfer rate:
- SuperSpeed USB 10 Gbps,
  - SuperSpeed USB 5 Gbps,
  - Hi-Speed 480 Mbps,

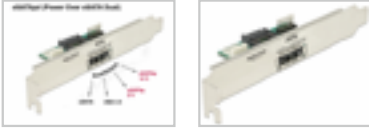
- Full-Speed 12 Mbps,
- Low-Speed 1.5 Mbps,
- eSATA 6 Gbps
- Enclosure with full-PCB
- LED indicator for power
- Colour: black
- Dimensions (LxWxH): ca. 82.5 x 60 x 12 mm
- Hot Swap, Plug & Play
- Power supply specification:
  - 5 V, ground outside, plus inside
- Dimensions:
  - inside:  $\varnothing$  ca. 1.35 mm
  - outside:  $\varnothing$  ca. 3.5 mm
  - length: ca. 8.5 mm

- Optional power supply: Navilock 41337
- System requirements:
  - Windows 7/7-64/8.1/8.1-64/10/10-64, Linux ex Kernel 4.6, Mac OS 10.12
  - PC or laptop with a free USB Type-C™ port

# eSATAp 3 in 1 series

Delock Slot bracket  
1 x eSATApd 5 V / 12 V

63921



- Connectors:
  - external:
    - 1 x eSATApd male
  - internal:
    - 1 x 4 pin Floppy male
    - 1 x SATA 7 pin plug
    - 1 x 9 pin USB 2.0 pin header male
- Voltage: eSATApd 5 V and 12 V
- System requirements:
  - PC with one free slot
  - Power supply with one free 4 pin floppy power connector
  - Motherboard with a free 7 pin SATA plug
  - Motherboard with a free 9 pin USB 2.0 pin



header male

## Delock PCI Express Card > 2 x Multiport USB 3.0 + eSATAp

89288



- You can connect devices like Hub, Card reader, external enclosure etc. with following interfaces:
- USB 3.0, USB 2.0, eSATAp (Power Over eSATA 5 V), eSATA
- Connector:
    - external: 2 x Multiport USB 3.0 + eSATAp
    - internal: 1 x 19 pin USB 3.0 pin header, 1 x PCI Express x1, 1 x power connector 4 pin
  - Supports SATA Port Multiplier
  - PCI Express 2.0
  - Data transfer rate: eSATA up to 6 Gb/s, USB 3.0 up to 5 Gb/s,



- USB 2.0 up to 480 Mb/s
- System requirements:
    - Windows 2000/XP/XP-64/Server-2003/Server-2003-64/Vista/Vista-64/7/7-64
    - PC with one free PCI Express slot
    - Mainboard with one free USB 3.0 19 pin pin header

## Delock Front Panel 2 x Multiport USB 3.0 + eSATAp

61862



- You can connect different devices like e.g. hubs, card reader, external enclosure etc. with following interfaces:
- USB 3.0, USB 2.0, eSATAp (Power Over eSATA 5 V), eSATA
- Connector:
    - external: 2 x Multiport USB 3.0 + eSATAp
    - internal: 1 x 19 pin USB 3.0 pin header, 2 x SATA 7 pin, 1 x power connector 4 pin
  - For installation into 3.5 bay
  - Slot bracket for installation into a PC slot
  - Plug & Play
  - OS independent, no driver installation required



- System requirements:
  - PC with one free 3.5 bay or one free slot
  - One free internal USB 3.0 pin header
  - Two free internal SATA ports

## Delock Adapter USB 3.0 to eSATAp

61776



- Connectors:
    - USB 2.0 type Micro-B male >
    - USB 2.0 type Micro-B female
  - 3 digits LED indicator
  - Automatical switching between Volt and Ampere display
  - For direct voltage 5 V (max. indication up to 6.00 V)
  - Max. 4 A
  - Colour: black
  - Dimensions incl. connector (LxWxH): ca. 48 x 15 x 9 mm
- System requirements
    - A free USB Micro-B female port

## Delock Adapter Power-over-eSATA > 1x eSATA and 1x USB

65119



- Power-over-eSATA to eSATA and USB port
- Data transfer rate:
  - eSATA up to 3Gbps
  - USB up to 480Mbps
- System requirement:
  - Notebook with a free Power Over eSATA port

