

Slim Straight A to Low Profile Angle Micro-B Cables-M/M

• Passive: 0.5m / 1m / 2m / 3m

• Active: 4m / 5m / 6m / ... / 20m (repeater size: 42(L) x 10(W) x 9(T)mm)

- **Slim A Plug**
- **Space-saving Micro-B Plug** (without or with locking screws)
- **Thin & Flexible Cable** (O.D.: 4.3mm, USB 2.0 + USB 3.0)
- **Tiny repeater for Active Cable** (42(L) x 10(W) x 9(T) in mm)
- **USB 3.0 bus-powered** (no external power supply needed)

Slim Straight A Plug




thin!
6.5mm



short!
31.5mm

15.8mm narrow!

support High Speed & High Resolution USB3 Machine Vision Cameras without lost frames all the time.

high frame rate 170 fps at full 2.0~2.3 MP resolution, high frame rate 121 fps at full 3.2 MP resolution, high frame rate 90 fps at full 4.0~4.2 MP resolution, high frame rate 75 fps at full 5 MP resolution, high frame rate 30 fps at full 12 MP resolution, high frame rate 21 fps at full 18 MP resolution (500 MB/s wide bandwidth data throughput)

Low Profile Left Angle Micro-B Plug

with locking screws

Back Front

USB3 Machine Vision camera

Straight A to Left Angle Micro-B Cable-M/M:



- CBL-USPD302MB-0.5mLA / 1mLA / 2mLA / 3mLA
- CBL-USPD302MB-4mLA / 5mLA / 6mLA / ... / 20mLA

6.5mm thin!

24mm narrow!

10mm short!

Low Profile Right Angle Micro-B Plug

with locking screws

Back Front

USB3 Machine Vision camera

Straight A to Right Angle Micro-B Cable-M/M:



- CBL-USPD302MB-0.5mRA / 1mRA / 2mRA / 3mRA
- CBL-USPD302MB-4mRA / 5mRA / 6mRA / ... / 20mRA

6.5mm thin!

24mm narrow!

10mm short!

Low Profile Up Angle Micro-B Plug

with locking screws

Back Front

USB3 Machine Vision camera

Straight A to Up Angle Micro-B Cable-M/M:



- CBL-USPD302MB-0.5mUA / 1mUA / 2mUA / 3mUA
- CBL-USPD302MB-4mUA / 5mUA / 6mUA / ... / 20mUA

6.5mm thin!

14mm short!

16.5mm narrow!

Low Profile Down Angle Micro-B Plug

with locking screws

Back Front

USB3 Machine Vision camera

Straight A to Down Angle Micro-B Cable-M/M:

- CBL-USPD302MB-0.5mDA / 1mDA / 2mDA / 3mDA
- CBL-USPD302MB-4mDA / 5mDA / 6mDA / ... / 20mDA

6.5mm thin!

14mm short!

16.5mm narrow!

Fit for



•Basler



•IDS



•JAI



•Matrix Vision



•Point Grey



•SENTECH



•SVS-VISTEK



•The Imaging Source



•Toshiba Teli



•XIMEA

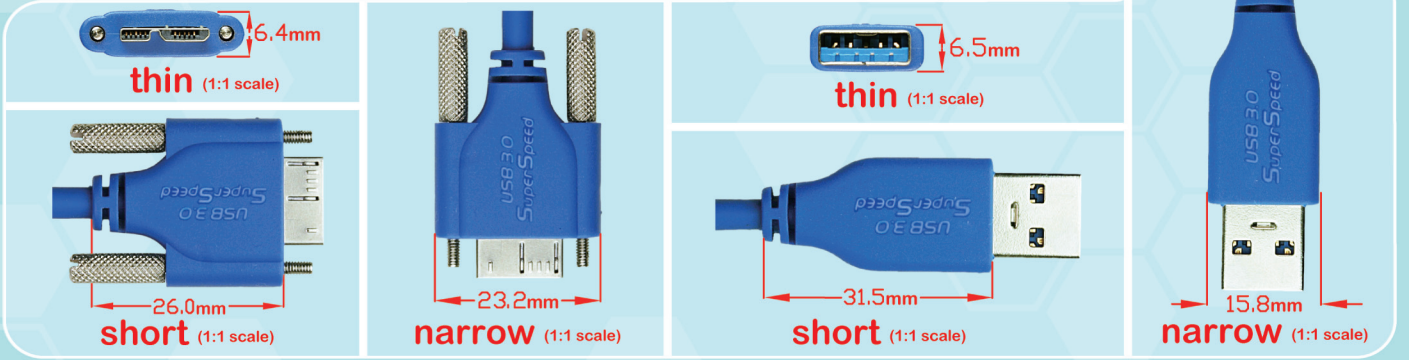
Ultra Slim

USB3 Straight A to Straight Micro-B Machine Vision Camera Cables - M/M

with locking screws on Micro-B plug

[1m,2m,3m,4m,5m,6m,7m,8m,9m,10m, ..., 20m]

O.D. : 4.3mm, 30AWG - U3 / 32AWG - U2 / 24AWG-PWR



• support High Speed & High Resolution USB3 Cameras

high frame rate 170 fps at full 2.0~2.3 MP resolution, high frame rate 90 fps at full 4.0~4.2 MP resolution
(500 MB/s wide bandwidth data throughput)
without lost frames all the time.

Flexible
Wide Bandwidth

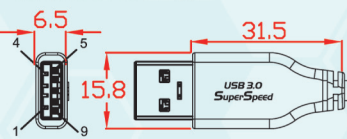


| USB A(M) | PIN OUT | USB MicroB(M) |
|----------|------------|---------------|
| 1 | RED | 1 |
| 2 | WHITE | 2 |
| 3 | GREEN | 3 |
| 4 | BLACK | 5 |
| 5 | BLUE | 6 |
| 6 | YELLOW | 7 |
| 7 | DRAIN WIRE | 8 |
| 8 | PURPLE | 9 |
| 9 | ORANGE | 10 |
| SHELL | BRAID | SHELL |

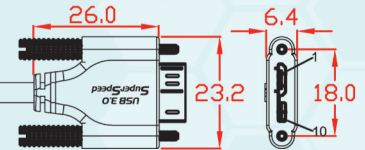
[1m,2m,3m]

CBL-USPD302MBS-1m/2m/3m (Passive Type-no repeater)

• Straight USB 3.0 A Plug :



• Straight USB 3.0 Micro-B Plug :



Flexible
Wide Bandwidth

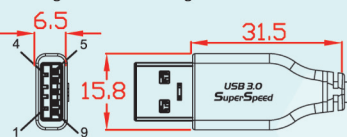


| USB A(M) | PIN OUT | USB MicroB(M) |
|----------|------------|---------------|
| 1 | RED | 1 |
| 2 | WHITE | 2 |
| 3 | GREEN | 3 |
| 4 | BLACK | 5 |
| 5 | BLUE | 6 |
| 6 | YELLOW | 7 |
| 7 | DRAIN WIRE | 8 |
| 8 | PURPLE | 9 |
| 9 | ORANGE | 10 |
| SHELL | BRAID | SHELL |

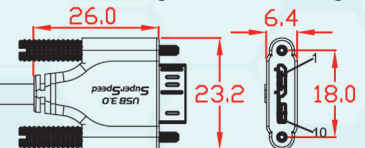
[4m,5m,6m,7m,8m]

CBL-USD302MBS-4m/5m/6m/7m/8m (Active Type-with 1 repeater)

• Straight USB 3.0 A Plug :



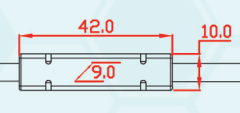
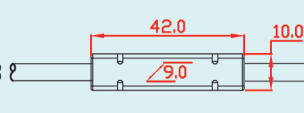
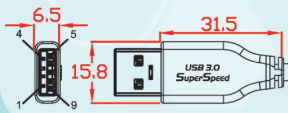
• Straight USB 3.0 Micro-B Plug :



[9m, 10m, 11m, 12m]

CBL-USD302MBS-9m/10m/11m/12m (Active Type-with 2 repeaters)

• Straight USB 3.0 A Plug :



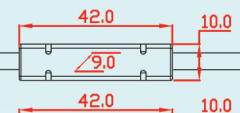
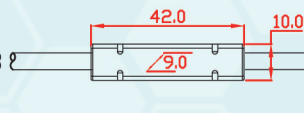
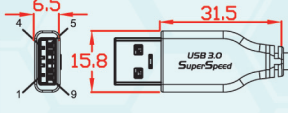
• Straight USB 3.0 Micro-B Plug :



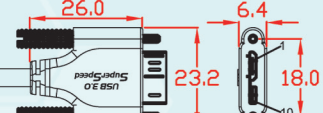
[13m, 14m, 15m, 16m]

CBL-USD302MBS-13m/14m/15m/16m (Active Type-with 3 repeaters)

• Straight USB 3.0 A Plug :



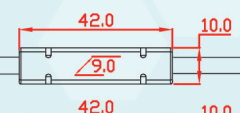
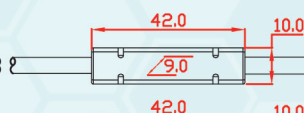
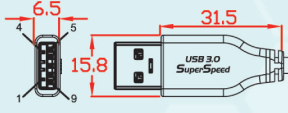
• Straight USB 3.0 Micro-B Plug :



[17m, 18m, 19m, 20m]

CBL-USD302MBS-17m/18m/19m/20m (Active Type-with 4 repeaters)

• Straight USB 3.0 A Plug :



• Straight USB 3.0 Micro-B Plug :



• fit for Basler's small cameras



• fit for IDS's small cameras



• fit for JAI's small cameras



• fit for Matrix Vision's small cameras



• fit for Point Grey's small cameras



• fit for SENTECH's small cameras



• fit for SVS-VISTEK's small cameras



• fit for The Imaging Source's small cameras



• fit for Toshiba Teli's small cameras



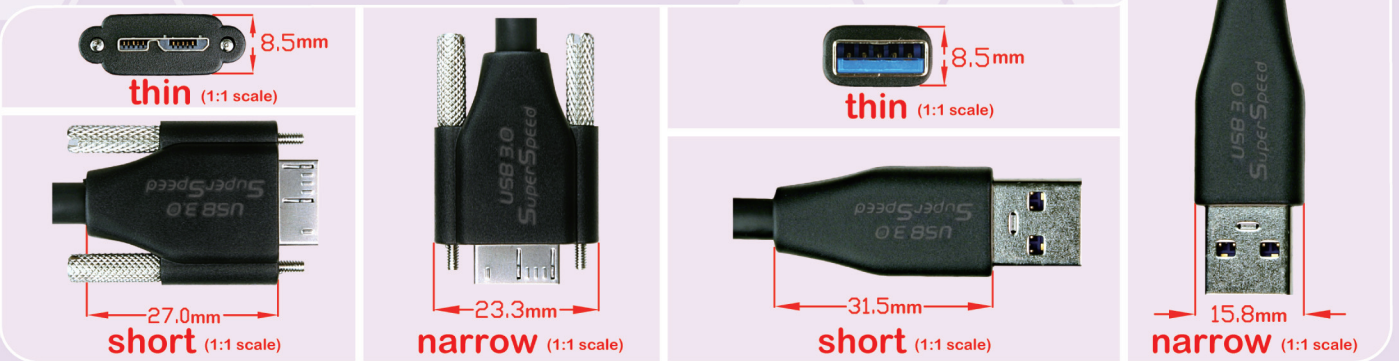
• fit for XIMEA's small cameras

Passive
Compact

USB3 Straight A to Micro-B Machine Vision Camera Cables - M/M with locking screws on Micro-B plug

[1m,2m,3m,4m,5m,6m,7m]

O.D. : 5.6mm, 28AWG - U3 / 28AWG - U2 / 20AWG-PWR



- support High Speed & High Resolution USB3 Cameras
high frame rate 170 fps at full 2.0~2.3 MP resolution, high frame rate 90 fps at full 4.0~4.2 MP resolution
(500 MB/s wide bandwidth data throughput)
without lost frames all the time.



Wide Bandwidth

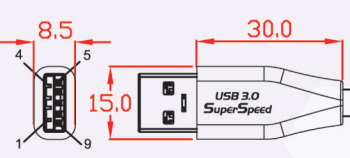


| PIN OUT | |
|----------|---------------|
| USB A(M) | USB MicroB(M) |
| 1 | RED |
| 2 | WHITE |
| 3 | GREEN |
| 4 | BLACK |
| 5 | BLUE |
| 6 | YELLOW |
| 7 | DRAIN WIRE |
| 8 | PURPLE |
| 9 | ORANGE |
| SHELL | BRAID |

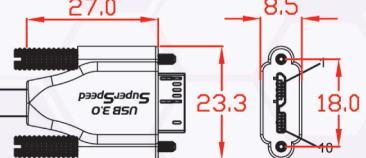
[1m,2m,3m,4m,5m,6m,7m]

CBL-PD302MBS-1m/2m/3m
CBL-PD302MBSWB-4m/5m/6m/7m

• Straight USB 3.0 A Plug :



• Straight USB 3.0 Micro-B Plug :



Wide Bandwidth



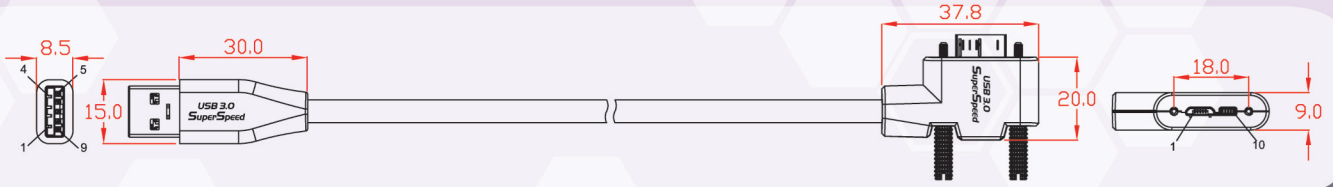
Left Angle

| PIN OUT | | |
|----------|---------------|-------|
| USB A(M) | USB MicroB(M) | |
| 1 | RED | 1 |
| 2 | WHITE | 2 |
| 3 | GREEN | 3 |
| 4 | BLACK | 5 |
| 5 | BLUE | 6 |
| 6 | YELLOW | 7 |
| 7 | DRAIN WIRE | 8 |
| 8 | PURPLE | 9 |
| 9 | ORANGE | 10 |
| SHELL | BRAID | SHELL |

[1m, 2m, 3m, 4m, 5m, 6m, 7m]

CBL-PD302MBS-1mLA/2mLA/3mLA

CBL-PD302MBSWB-4mLA/5mLA/6mLA/7mLA



Wide Bandwidth



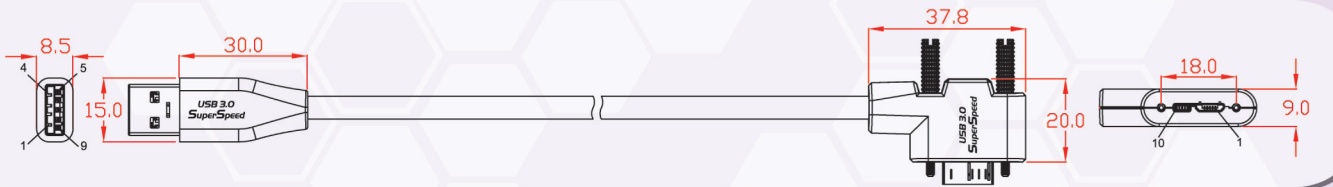
Right Angle

| PIN OUT | | |
|----------|---------------|-------|
| USB A(M) | USB MicroB(M) | |
| 1 | RED | 1 |
| 2 | WHITE | 2 |
| 3 | GREEN | 3 |
| 4 | BLACK | 5 |
| 5 | BLUE | 6 |
| 6 | YELLOW | 7 |
| 7 | DRAIN WIRE | 8 |
| 8 | PURPLE | 9 |
| 9 | ORANGE | 10 |
| SHELL | BRAID | SHELL |

[1m, 2m, 3m, 4m, 5m, 6m, 7m]

CBL-PD302MBS-1mRA/2mRA/3mRA

CBL-PD302MBSWB-4mRA/5mRA/6mRA/7mRA



Wide Bandwidth



Up Angle

| PIN OUT | | |
|----------|---------------|-------|
| USB A(M) | USB MicroB(M) | |
| 1 | RED | 1 |
| 2 | WHITE | 2 |
| 3 | GREEN | 3 |
| 4 | BLACK | 5 |
| 5 | BLUE | 6 |
| 6 | YELLOW | 7 |
| 7 | DRAIN WIRE | 8 |
| 8 | PURPLE | 9 |
| 9 | ORANGE | 10 |
| SHELL | BRAID | SHELL |

[1m, 2m, 3m, 4m, 5m, 6m, 7m]

CBL-PD302MBS-1mUA/2mUA/3mUA

CBL-PD302MBSWB-4mUA/5mUA/6mUA/7mUA



Wide Bandwidth



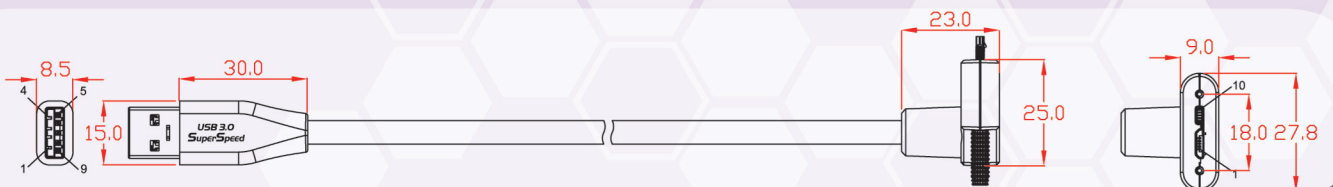
Down Angle

| PIN OUT | | |
|----------|---------------|-------|
| USB A(M) | USB MicroB(M) | |
| 1 | RED | 1 |
| 2 | WHITE | 2 |
| 3 | GREEN | 3 |
| 4 | BLACK | 5 |
| 5 | BLUE | 6 |
| 6 | YELLOW | 7 |
| 7 | DRAIN WIRE | 8 |
| 8 | PURPLE | 9 |
| 9 | ORANGE | 10 |
| SHELL | BRAID | SHELL |

[1m, 2m, 3m, 4m, 5m, 6m, 7m]

CBL-PD302MBS-1mDA/2mDA/3mDA

CBL-PD302MBSWB-4mDA/5mDA/6mDA/7mDA



Active

Compact

USB3 Straight A to Micro-B Machine Vision Camera Cables - M/M

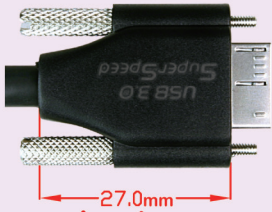
with locking screws on Micro-B plug

[5m,7m,10m,15m,20m,25m,30m,35m]

O.D. : 5.6mm, 28AWG - U3 / 28AWG - U2 / 20AWG-PWR



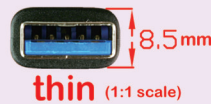
thin (1:1 scale)



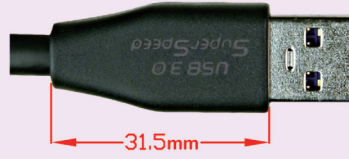
short (1:1 scale)



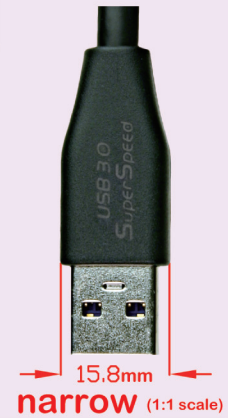
narrow (1:1 scale)



thin (1:1 scale)



short (1:1 scale)



narrow (1:1 scale)

• support High Speed & High Resolution USB3 Cameras

high frame rate 170 fps at full 2.0~2.3 MP resolution, high frame rate 90 fps at full 4.0~4.2 MP resolution
(500 MB/s wide bandwidth data throughput)
without lost frames all the time.



• work with Basler's cameras



• work with IDS's cameras



• work with JAI's cameras



• work with Matrix Vision's cameras



• work with Point Grey's cameras



• work with SENTECH's cameras



• work with SVS-VISTEK's cameras



• work with The Imaging Source's cameras



• work with Toshiba Teli's cameras



• work with XIMEA's cameras

Wide Bandwidth



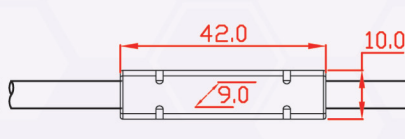
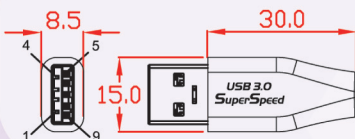
| PIN OUT | | |
|----------|---------------|-------|
| USB A(M) | USB MicroB(M) | |
| 1 | RED | 1 |
| 2 | WHITE | 2 |
| 3 | GREEN | 3 |
| 4 | BLACK | 5 |
| 5 | BLUE | 6 |
| 6 | YELLOW | 7 |
| 7 | DRAIN WIRE | 8 |
| 8 | PURPLE | 9 |
| 9 | ORANGE | 10 |
| SHELL | BRAID | SHELL |

[5m,7m,10m,15m,20m,25m,30m,35m]

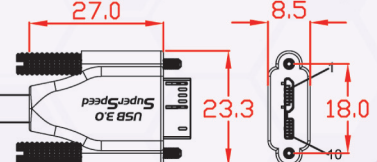
CBL-ED302MBCS-5m/7m/10m

CBL-ED302MBCSWB-15m/20m/25m/30m/35m

• Straight USB 3.0 A Plug :



• Straight USB 3.0 Micro-B Plug :



Wide Bandwidth



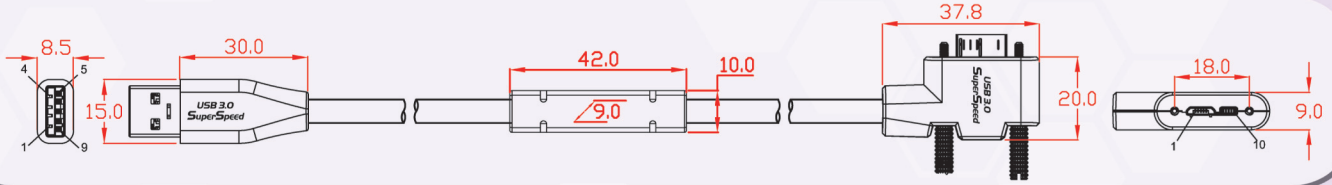
Left Angle

| PIN OUT | | | |
|----------|---------------|-------|-------|
| USB A(M) | USB MicroB(M) | | |
| 1 | RED | 1 | 1 |
| 2 | WHITE | 2 | 2 |
| 3 | GREEN | 3 | 3 |
| 4 | BLACK | 5 | 5 |
| 5 | BLUE | 6 | 6 |
| 6 | YELLOW | 7 | 7 |
| 7 | DRAIN WIRE | 8 | 8 |
| 8 | PURPLE | 9 | 9 |
| 9 | ORANGE | 10 | 10 |
| SHELL | BRAID | SHELL | SHELL |

[5m,7m,10m,15m,20m,25m,30m,35m]

CBL-ED302MBCS-5mLA/7mLA/10mLA

CBL-ED302MBCSWB-15mLA/20mLA/25mLA/30mLA/35mLA



Wide Bandwidth



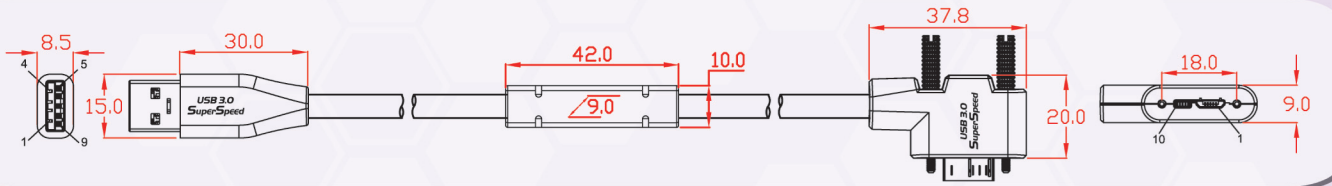
Right Angle

| PIN OUT | | | |
|----------|---------------|-------|-------|
| USB A(M) | USB MicroB(M) | | |
| 1 | RED | 1 | 1 |
| 2 | WHITE | 2 | 2 |
| 3 | GREEN | 3 | 3 |
| 4 | BLACK | 5 | 5 |
| 5 | BLUE | 6 | 6 |
| 6 | YELLOW | 7 | 7 |
| 7 | DRAIN WIRE | 8 | 8 |
| 8 | PURPLE | 9 | 9 |
| 9 | ORANGE | 10 | 10 |
| SHELL | BRAID | SHELL | SHELL |

[5m,7m,10m,15m,20m,25m,30m,35m]

CBL-ED302MBCS-5mRA/7mRA/10mRA

CBL-ED302MBCSWB-15mRA/20mRA/25mRA/30mRA/35mRA



Wide Bandwidth



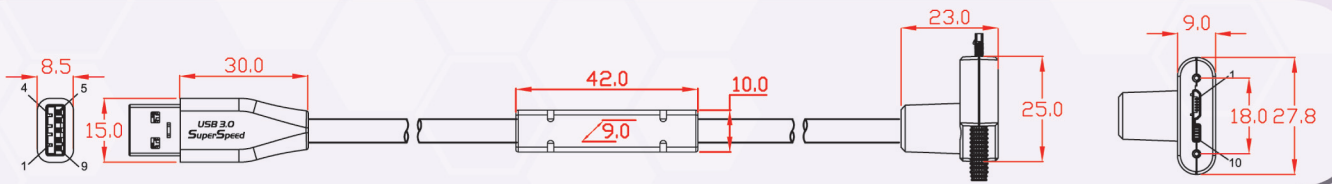
Up Angle

| PIN OUT | | | |
|----------|---------------|-------|-------|
| USB A(M) | USB MicroB(M) | | |
| 1 | RED | 1 | 1 |
| 2 | WHITE | 2 | 2 |
| 3 | GREEN | 3 | 3 |
| 4 | BLACK | 5 | 5 |
| 5 | BLUE | 6 | 6 |
| 6 | YELLOW | 7 | 7 |
| 7 | DRAIN WIRE | 8 | 8 |
| 8 | PURPLE | 9 | 9 |
| 9 | ORANGE | 10 | 10 |
| SHELL | BRAID | SHELL | SHELL |

[5m,7m,10m,15m,20m,25m,30m,35m]

CBL-ED302MBCS-5mUA/7mUA/10mUA

CBL-ED302MBCSWB-15mUA/20mUA/25mUA/30mUA/35mUA



Wide Bandwidth



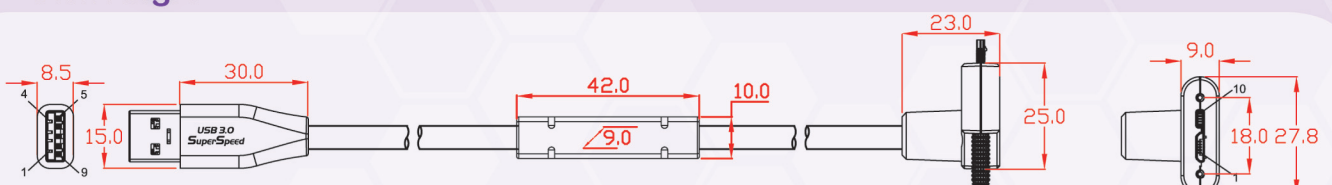
Down Angle

| PIN OUT | | | |
|----------|---------------|-------|-------|
| USB A(M) | USB MicroB(M) | | |
| 1 | RED | 1 | 1 |
| 2 | WHITE | 2 | 2 |
| 3 | GREEN | 3 | 3 |
| 4 | BLACK | 5 | 5 |
| 5 | BLUE | 6 | 6 |
| 6 | YELLOW | 7 | 7 |
| 7 | DRAIN WIRE | 8 | 8 |
| 8 | PURPLE | 9 | 9 |
| 9 | ORANGE | 10 | 10 |
| SHELL | BRAID | SHELL | SHELL |

[5m,7m,10m,15m,20m,25m,30m,35m]

CBL-ED302MBCS-5mDA/7mDA/10mDA

CBL-ED302MBCSWB-15mDA/20mDA/25mDA/30mDA/35mDA



Repeater(s):

5m:1 / 7m:1 / 10m:1 / 15m:2 / 20m:3 / 25m:4 / 30m:4 / 35m:6

USB3 Machine Vision Camera Cables

High-Flex (Hi-Flex/Continuous-Flex)

- Drag-chain Testing (Type-U Testing):

(1) R:125mm ▶ **Minimum 10,000,000 cycles (double strokes)**

(2) R:100mm ▶ Minimum 7,500,000 cycles (double strokes)

(3) R:88mm ▶ Minimum 5,000,000 cycles (double strokes)

USB3 Connectors [, Repeater(s)] & Cable Assemblies

Passive ▶ CBL-HFPD3igMBS-1m/2m/3m



Active ▶ CBL-HFD3igMBS-4m/5m/6m/7m/8m/9m/10m/...../20m



● support High Speed & High Resolution USB3 Cameras

high frame rate 170 fps at full 2.0~2.3 MP resolution,

high frame rate 121 fps at full 3.2 MP resolution,

high frame rate 90 fps at full 4.0~4.2 MP resolution,

high frame rate 75 fps at full 5 MP resolution,

high frame rate 30 fps at full 12 MP resolution,

high frame rate 21 fps at full 18 MP resolution

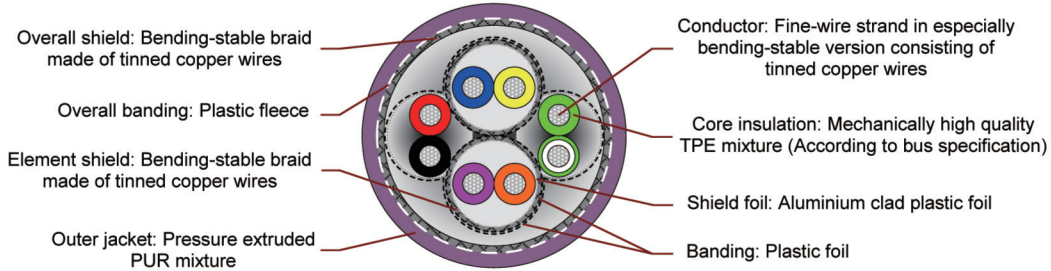
(500 MB/s wide bandwidth data throughput)

without lost frames all the time.

● USB 3.0/2.0/1.1/1.0 supported

PUR - e-chain[®] - Bus cable for medium load requirements (class 4.3.3): shielded, oil- and coolant-resistant, PVC- and halogen- free, notch-resistant as well as flame-retardant.

CFBUS.PUR.068 (USB 3.0)



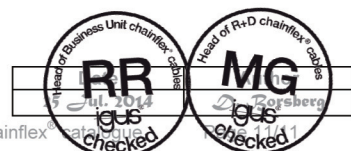
Electrical values:

| | |
|--|--|
| Nominal voltage: | 50 V |
| Test voltage: | 500 V (Core / Core) & 500 V (Core / Shield) following DIN EN 50289-1-3 |
| Certifications: | cRUus: (E310776: Style 1598 & 20236, 30 V / 80 °C) |
| Operating capacity: | Shielded pair: approx. 60 pF / m Unshielded pair: approx. 52 pF / m ⇒ (at 800 Hz) following DIN EN 50289-1-5 |
| Characteristic wave resistance: | Shielded pair: 90 ± 18 Ω (at 1 MHz to 1200 MHz) Unshielded pair: 105 ± 16 Ω (at 1 MHz) ⇒ following DIN EN 50289-1-11 |

| Line attenuation {Signal pairs} [approx. db / 100 m] (following DIN EN 50289-1-8) | | | |
|---|-----|------|------|
| Frequency [MHz] | 1 | 625 | 1200 |
| Part no. | | | |
| CFBUS.PUR.068 | 0,4 | 11,5 | 18,0 |

Construction table:

| Part No. | Colour code | Cable construction |
|---------------|--------------|-----------------------------|
| CFBUS.PUR.068 | 2x2xAWG28 | red/black, green/whitegreen |
| | 2x(2xAWG28)C | blue/yellow, orange/violet |



High-Flex (Hi-Flex, Continuous-Flex)

Drag-chain Testing (Type-U Testing):

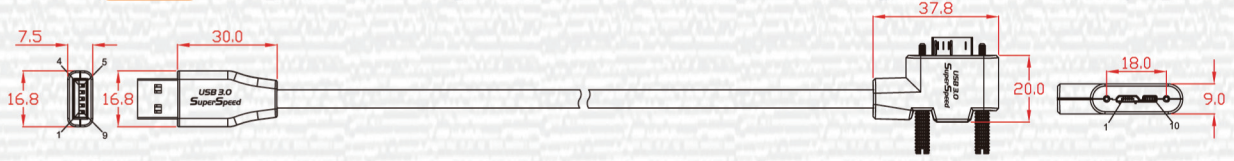
(1) R:125mm → Minimum 10,000,000 cycles (double strokes)

(2) R:100mm → Minimum 7,500,000 cycles (double strokes)

(3) R:88mm → Minimum 5,000,000 cycles (double strokes)



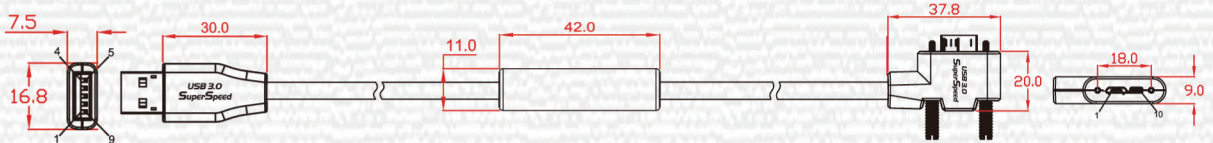
Passive USB 3.0 Straight A to Left Angle Micro B Cable - M/M, with locking screws on Micro B plug



| | Part No. | Length |
|-----|---------------------|----------------------|
| 1-1 | CBL-HFPD3igMBS-1mLA | 1 meter (3.28 feet) |
| 1-2 | CBL-HFPD3igMBS-2mLA | 2 meters (6.56 feet) |
| 1-3 | CBL-HFPD3igMBS-3mLA | 3 meters (9.84 feet) |



Active USB 3.0 Straight A to Left Angle Micro B Cable - M/M, with locking screws on Micro B plug



| | Part No. | Length |
|------|---------------------|------------------------|
| 2-1 | CBL-HFD3igMBS-4mLA | 4 meters (13.12 feet) |
| 2-2 | CBL-HFD3igMBS-5mLA | 5 meters (16.40 feet) |
| 2-3 | CBL-HFD3igMBS-6mLA | 6 meters (19.68 feet) |
| 2-4 | CBL-HFD3igMBS-7mLA | 7 meters (22.96 feet) |
| 2-5 | CBL-HFD3igMBS-8mLA | 8 meters (26.24 feet) |
| 2-6 | CBL-HFD3igMBS-9mLA | 9 meters (29.52 feet) |
| 2-7 | CBL-HFD3igMBS-10mLA | 10 meters (32.80 feet) |
| 2-8 | CBL-HFD3igMBS-11mLA | 11 meters (36.08 feet) |
| 2-9 | CBL-HFD3igMBS-12mLA | 12 meters (39.36 feet) |
| 2-10 | CBL-HFD3igMBS-13mLA | 13 meters (42.64 feet) |
| 2-11 | CBL-HFD3igMBS-14mLA | 14 meters (45.92 feet) |
| 2-12 | CBL-HFD3igMBS-15mLA | 15 meters (49.20 feet) |
| 2-13 | CBL-HFD3igMBS-16mLA | 16 meters (52.48 feet) |
| 2-14 | CBL-HFD3igMBS-17mLA | 17 meters (55.76 feet) |
| 2-15 | CBL-HFD3igMBS-18mLA | 18 meters (59.04 feet) |
| 2-16 | CBL-HFD3igMBS-19mLA | 19 meters (62.32 feet) |
| 2-17 | CBL-HFD3igMBS-20mLA | 20 meters (65.60 feet) |



High-Flex (Hi-Flex, Continuous-Flex)

Drag-chain Testing (Type-U Testing):

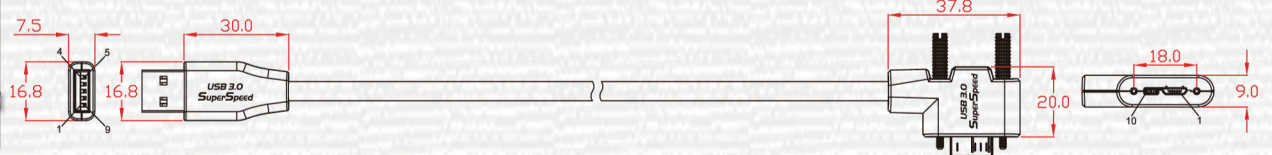
(1) R:125mm → Minimum 10,000,000 cycles (double strokes)

(2) R:100mm → Minimum 7,500,000 cycles (double strokes)

(3) R:88mm → Minimum 5,000,000 cycles (double strokes)



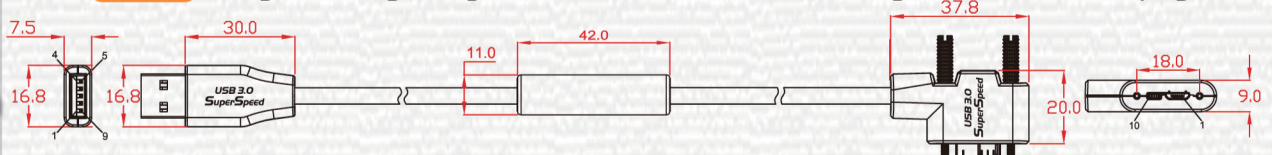
Passive USB 3.0 Straight A to Right Angle Micro B Cable - M/M, with locking screws on Micro B plug



| | Part No. | Length |
|-----|---------------------|----------------------|
| 1-1 | CBL-HFPD3igMBS-1mRA | 1 meter (3.28 feet) |
| 1-2 | CBL-HFPD3igMBS-2mRA | 2 meters (6.56 feet) |
| 1-3 | CBL-HFPD3igMBS-3mRA | 3 meters (9.84 feet) |



Active USB 3.0 Straight A to Right Angle Micro B Cable - M/M, with locking screws on Micro B plug



| | Part No. | Length |
|------|---------------------|------------------------|
| 2-1 | CBL-HFD3igMBS-4mRA | 4 meters (13.12 feet) |
| 2-2 | CBL-HFD3igMBS-5mRA | 5 meters (16.40 feet) |
| 2-3 | CBL-HFD3igMBS-6mRA | 6 meters (19.68 feet) |
| 2-4 | CBL-HFD3igMBS-7mRA | 7 meters (22.96 feet) |
| 2-5 | CBL-HFD3igMBS-8mRA | 8 meters (26.24 feet) |
| 2-6 | CBL-HFD3igMBS-9mRA | 9 meters (29.52 feet) |
| 2-7 | CBL-HFD3igMBS-10mRA | 10 meters (32.80 feet) |
| 2-8 | CBL-HFD3igMBS-11mRA | 11 meters (36.08 feet) |
| 2-9 | CBL-HFD3igMBS-12mRA | 12 meters (39.36 feet) |
| 2-10 | CBL-HFD3igMBS-13mRA | 13 meters (42.64 feet) |
| 2-11 | CBL-HFD3igMBS-14mRA | 14 meters (45.92 feet) |
| 2-12 | CBL-HFD3igMBS-15mRA | 15 meters (49.20 feet) |
| 2-13 | CBL-HFD3igMBS-16mRA | 16 meters (52.48 feet) |
| 2-14 | CBL-HFD3igMBS-17mRA | 17 meters (55.76 feet) |
| 2-15 | CBL-HFD3igMBS-18mRA | 18 meters (59.04 feet) |
| 2-16 | CBL-HFD3igMBS-19mRA | 19 meters (62.32 feet) |
| 2-17 | CBL-HFD3igMBS-20mRA | 20 meters (65.60 feet) |



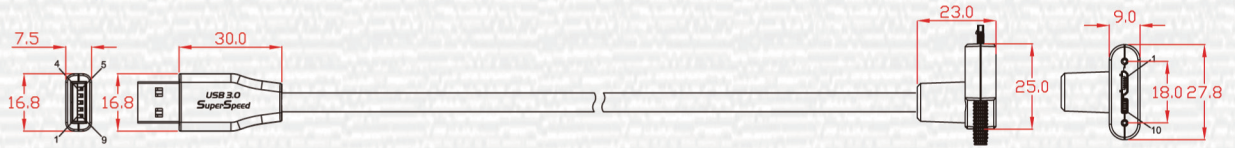
High-Flex (Hi-Flex, Continuous-Flex)

Drag-chain Testing (Type-U Testing):

- (1) R:125mm → Minimum 10,000,000 cycles (double strokes)
- (2) R:100mm → Minimum 7,500,000 cycles (double strokes)
- (3) R:88mm → Minimum 5,000,000 cycles (double strokes)



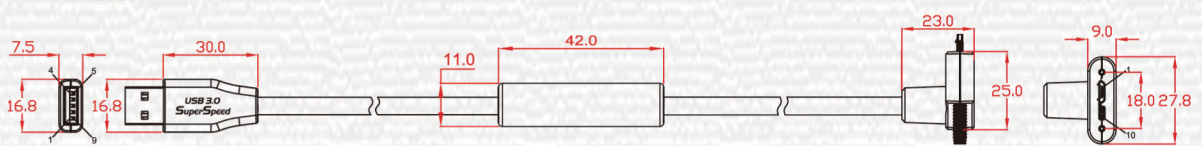
Passive USB 3.0 Straight A to Up Angle Micro B Cable - M/M, with locking screws on Micro B plug



| | Part No. | Length |
|-----|---------------------|----------------------|
| 1-1 | CBL-HFPD3igMBS-1mUA | 1 meter (3.28 feet) |
| 1-2 | CBL-HFPD3igMBS-2mUA | 2 meters (6.56 feet) |
| 1-3 | CBL-HFPD3igMBS-3mUA | 3 meters (9.84 feet) |



Active USB 3.0 Straight A to Up Angle Micro B Cable - M/M, with locking screws on Micro B plug



| | Part No. | Length |
|------|---------------------|------------------------|
| 2-1 | CBL-HFD3igMBS-4mUA | 4 meters (13.12 feet) |
| 2-2 | CBL-HFD3igMBS-5mUA | 5 meters (16.40 feet) |
| 2-3 | CBL-HFD3igMBS-6mUA | 6 meters (19.68 feet) |
| 2-4 | CBL-HFD3igMBS-7mUA | 7 meters (22.96 feet) |
| 2-5 | CBL-HFD3igMBS-8mUA | 8 meters (26.24 feet) |
| 2-6 | CBL-HFD3igMBS-9mUA | 9 meters (29.52 feet) |
| 2-7 | CBL-HFD3igMBS-10mUA | 10 meters (32.80 feet) |
| 2-8 | CBL-HFD3igMBS-11mUA | 11 meters (36.08 feet) |
| 2-9 | CBL-HFD3igMBS-12mUA | 12 meters (39.36 feet) |
| 2-10 | CBL-HFD3igMBS-13mUA | 13 meters (42.64 feet) |
| 2-11 | CBL-HFD3igMBS-14mUA | 14 meters (45.92 feet) |
| 2-12 | CBL-HFD3igMBS-15mUA | 15 meters (49.20 feet) |
| 2-13 | CBL-HFD3igMBS-16mUA | 16 meters (52.48 feet) |
| 2-14 | CBL-HFD3igMBS-17mUA | 17 meters (55.76 feet) |
| 2-15 | CBL-HFD3igMBS-18mUA | 18 meters (59.04 feet) |
| 2-16 | CBL-HFD3igMBS-19mUA | 19 meters (62.32 feet) |
| 2-17 | CBL-HFD3igMBS-20mUA | 20 meters (65.60 feet) |



High-Flex (Hi-Flex, Continuous-Flex)

Drag-chain Testing (Type-U Testing):

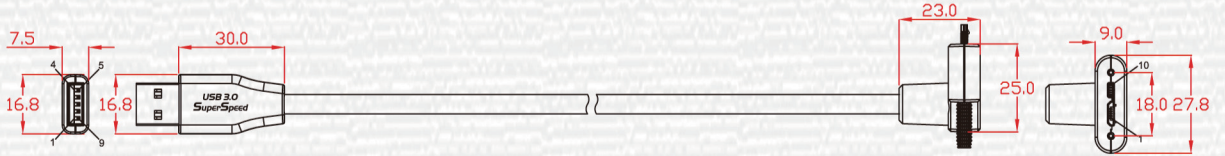
(1) R:125mm → Minimum 10,000,000 cycles (double strokes)

(2) R:100mm → Minimum 7,500,000 cycles (double strokes)

(3) R:88mm → Minimum 5,000,000 cycles (double strokes)



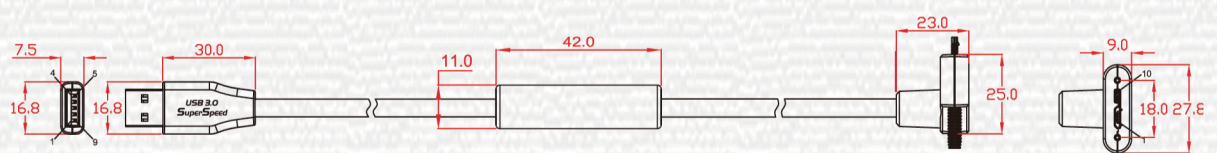
Passive USB 3.0 Straight A to Down Angle Micro B Cable - M/M, with locking screws on Micro B plug



| | Part No. | Length |
|-----|---------------------|----------------------|
| 1-1 | CBL-HFPD3igMBS-1mDA | 1 meter (3.28 feet) |
| 1-2 | CBL-HFPD3igMBS-2mDA | 2 meters (6.56 feet) |
| 1-3 | CBL-HFPD3igMBS-3mDA | 3 meters (9.84 feet) |



Active USB 3.0 Straight A to Down Angle Micro B Cable - M/M, with locking screws on Micro B plug

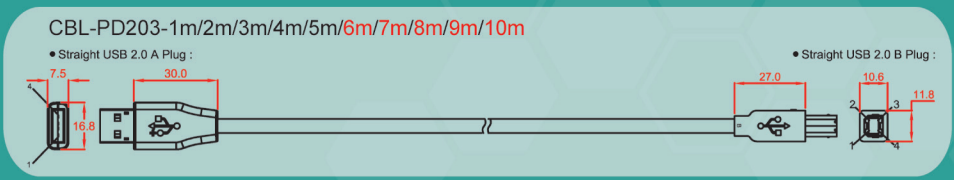
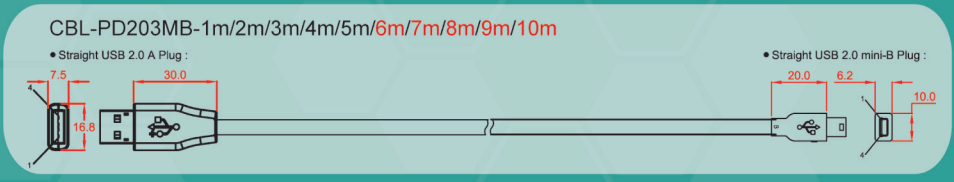
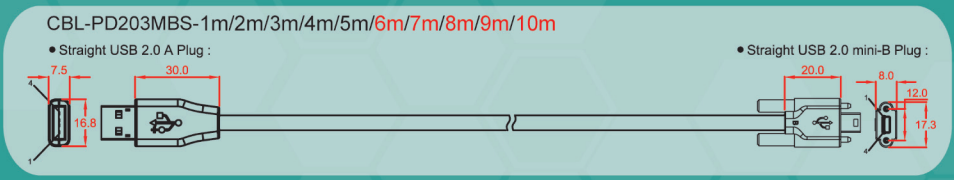
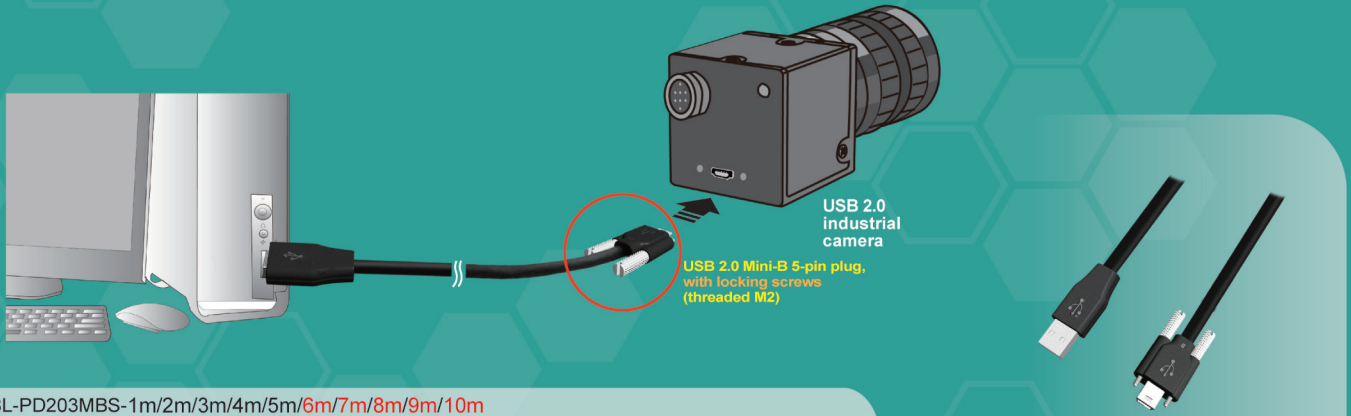


| | Part No. | Length |
|------|---------------------|------------------------|
| 2-1 | CBL-HFD3igMBS-4mDA | 4 meters (13.12 feet) |
| 2-2 | CBL-HFD3igMBS-5mDA | 5 meters (16.40 feet) |
| 2-3 | CBL-HFD3igMBS-6mDA | 6 meters (19.68 feet) |
| 2-4 | CBL-HFD3igMBS-7mDA | 7 meters (22.96 feet) |
| 2-5 | CBL-HFD3igMBS-8mDA | 8 meters (26.24 feet) |
| 2-6 | CBL-HFD3igMBS-9mDA | 9 meters (29.52 feet) |
| 2-7 | CBL-HFD3igMBS-10mDA | 10 meters (32.80 feet) |
| 2-8 | CBL-HFD3igMBS-11mDA | 11 meters (36.08 feet) |
| 2-9 | CBL-HFD3igMBS-12mDA | 12 meters (39.36 feet) |
| 2-10 | CBL-HFD3igMBS-13mDA | 13 meters (42.64 feet) |
| 2-11 | CBL-HFD3igMBS-14mDA | 14 meters (45.92 feet) |
| 2-12 | CBL-HFD3igMBS-15mDA | 15 meters (49.20 feet) |
| 2-13 | CBL-HFD3igMBS-16mDA | 16 meters (52.48 feet) |
| 2-14 | CBL-HFD3igMBS-17mDA | 17 meters (55.76 feet) |
| 2-15 | CBL-HFD3igMBS-18mDA | 18 meters (59.04 feet) |
| 2-16 | CBL-HFD3igMBS-19mDA | 19 meters (62.32 feet) |
| 2-17 | CBL-HFD3igMBS-20mDA | 20 meters (65.60 feet) |

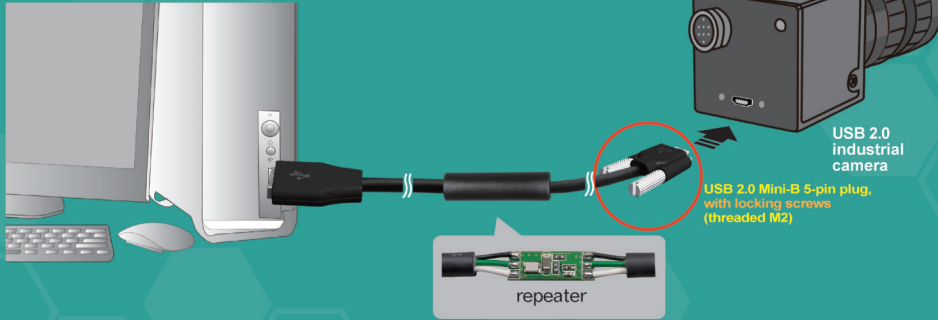


Passive USB2 Machine Vision Camera Cables

- 1m/2m/3m/4m/5m/6m/7m/8m/9m/10m



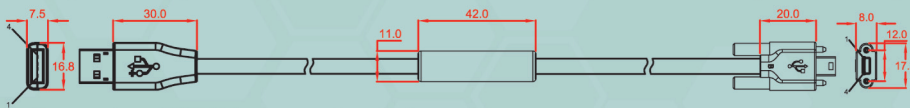
Long Distance **Active** USB2 Machine Vision Camera Cables



CBL-D203MBS-5m/7m/10m/15m/20m/25m/30m/35m/40m/45m/50m/55m/60m/65m/70m/75m/80m

• Straight USB 2.0 A Plug :

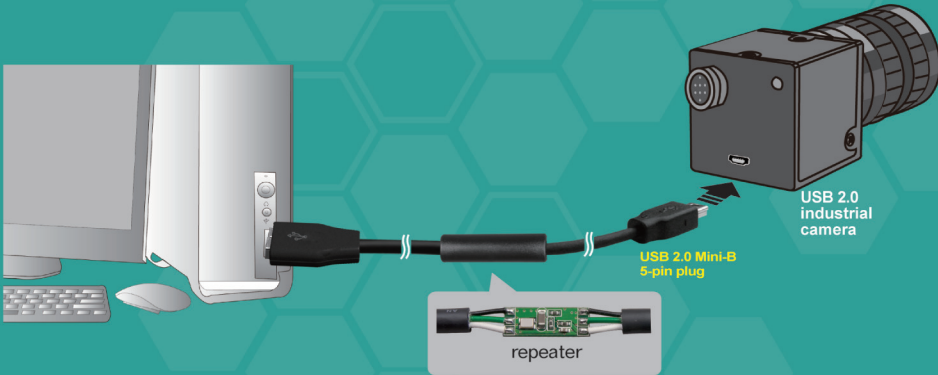
• Straight USB 2.0 mini-B Plug :



Connects a USB 2.0 camera located

5/7/10/15/20/25/30/35/40/45/50/55/60/65/70/80 meters

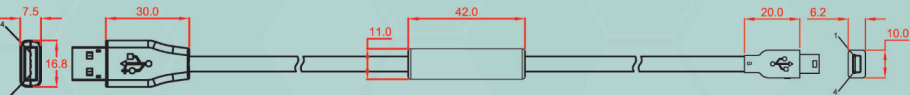
(16/22/32/49/65/82/98/114/131/147/164/180/196/213/262 feet) far away!!



CBL-D203MB-5m/7m/10m/15m/20m/25m/30m/35m/40m/45m/50m/55m/60m/65m/70m/75m/80m

• Straight USB 2.0 A Plug :

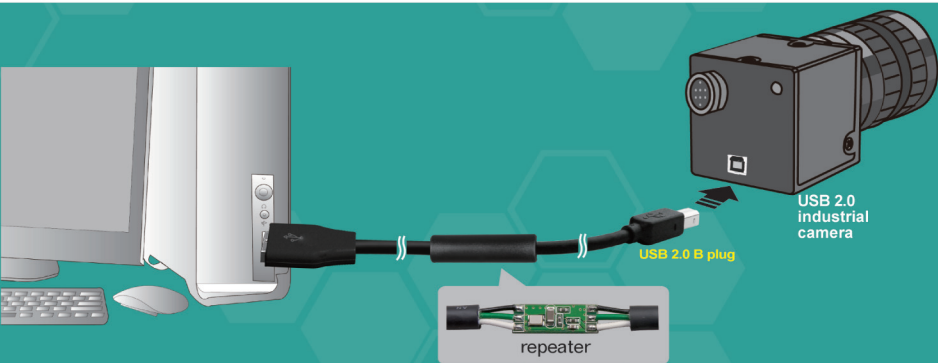
• Straight USB 2.0 mini-B Plug :



Connects a USB 2.0 device located

5/7/10/15/20/25/30/35/40/45/50/55/60/65/70/80 meters

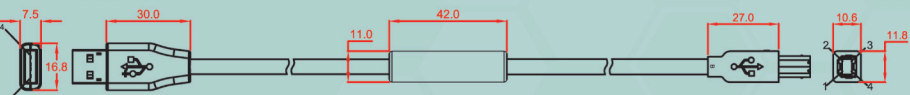
(16/22/32/49/65/82/98/114/131/147/164/180/196/213/262 feet) far away!!



CBL-D203-5m/7m/10m/15m/20m/25m/30m/35m/40m/45m/50m/55m/60m/65m/70m/75m/80m

• Straight USB 2.0 A Plug :

• Straight USB 2.0 B Plug :



Connects a USB 2.0 device located

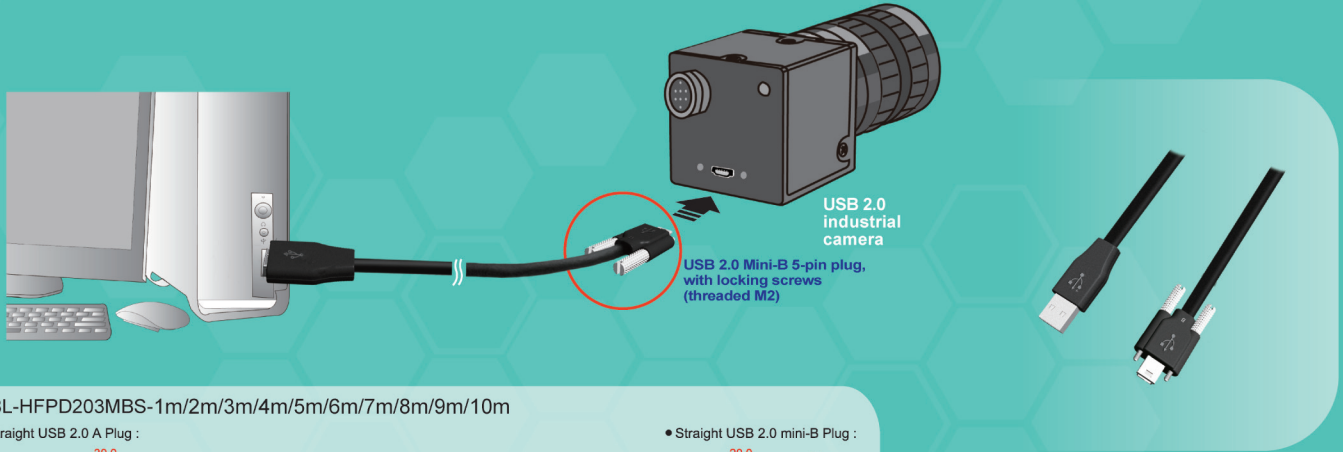
5/7/10/15/20/25/30/35/40/45/50/55/60/65/70/80 meters

(16/22/32/49/65/82/98/114/131/147/164/180/196/213/262 feet) far away!!

High-Flex (Continuous-Flex)

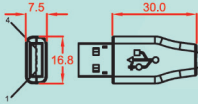
- Flex Testing:
 - (1) TYPE-U (Rolling, C-Track, C-Chain) / R=67.5mm ▶ Minimum 5,000,000 times
 - (2) TYPE-S / R=60mm ▶ Minimum 1,000,000 times
 - (3) 90° BENDING (Tick-Tock Bending) / R=60mm ▶ Minimum 1,000,000 times
- Cable O.D.:5.4mm

Passive USB2 Connectors & Cable Assemblies for Automated Systems- 1m/2m/3m/4m/5m/6m/7m/8m/9m/10m

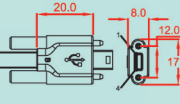


CBL-HFPD203MBS-1m/2m/3m/4m/5m/6m/7m/8m/9m/10m

• Straight USB 2.0 A Plug :

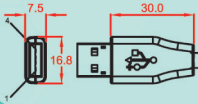


• Straight USB 2.0 mini-B Plug :

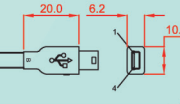


CBL-HFPD203MB-1m/2m/3m/4m/5m/6m/7m/8m/9m/10m

• Straight USB 2.0 A Plug :

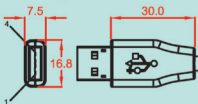


• Straight USB 2.0 mini-B Plug :

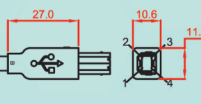


CBL-HFPD203-1m/2m/3m/4m/5m/6m/7m/8m/9m/10m

• Straight USB 2.0 A Plug :



• Straight USB 2.0 B Plug :



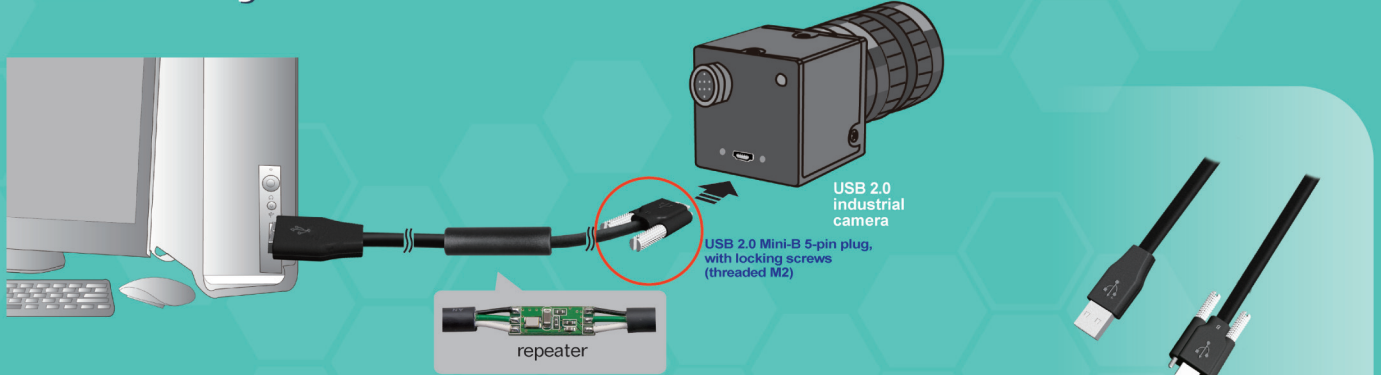
High-Flex (Continuous-Flex)

- Flex Testing:

- (1) TYPE-U (Rolling, C-Track, C-Chain) / R=67.5mm ▶ Minimum 5,000,000 times
- (2) TYPE-S / R=60mm ▶ Minimum 1,000,000 times
- (3) 90° BENDING (Tick-Tock Bending) / R=60mm ▶ Minimum 1,000,000 times

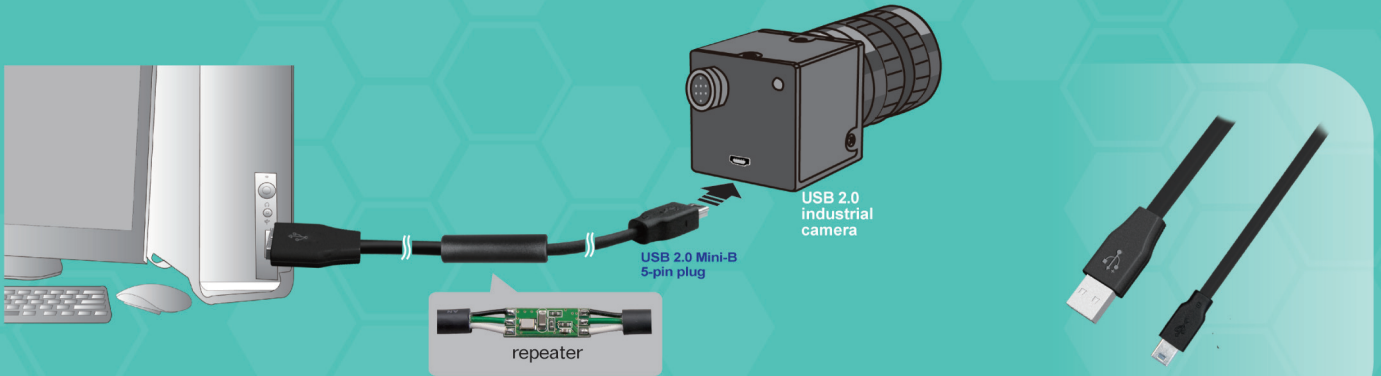
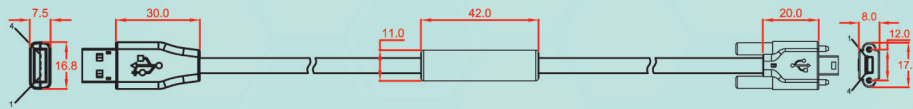
- Cable O.D.:5.4mm

Active USB2 Connectors, Repeater(s) & Cable Assemblies for Automated Systems- 15m/20m/25m/30m/35m/40m/50m



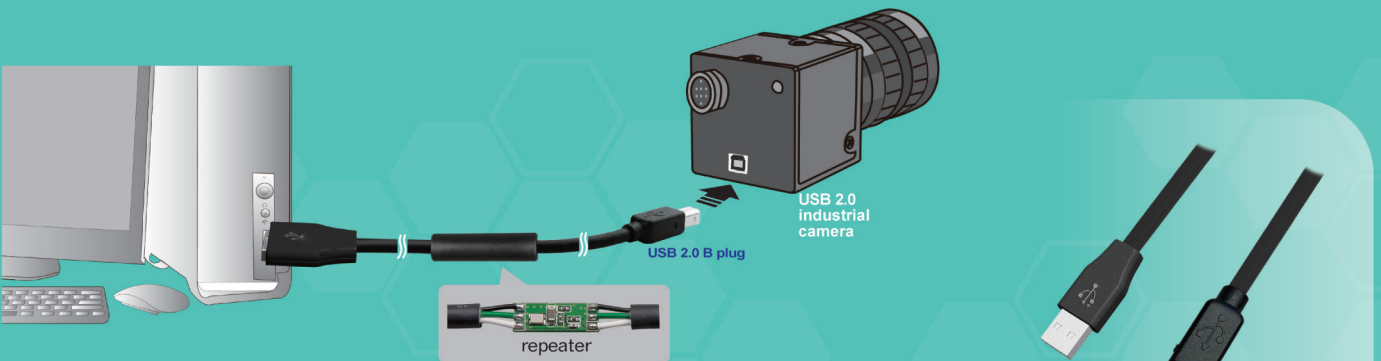
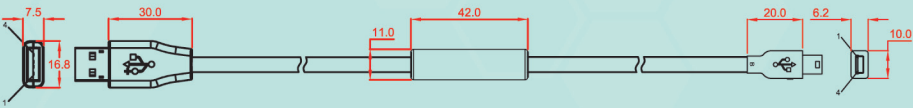
CBL-HFD203MBS-15m/20m/25m/30m/35m/40m/45m/50m

- Straight USB 2.0 A Plug :



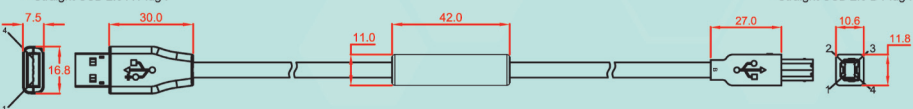
CBL-HFD203MB-15m/20m/25m/30m/35m/40m/45m/50m

- Straight USB 2.0 A Plug :



CBL-HFD203-15m/20m/25m/30m/35m/40m/45m/50m

- Straight USB 2.0 A Plug :



USB 3.0 5Gbps SuperSpeed

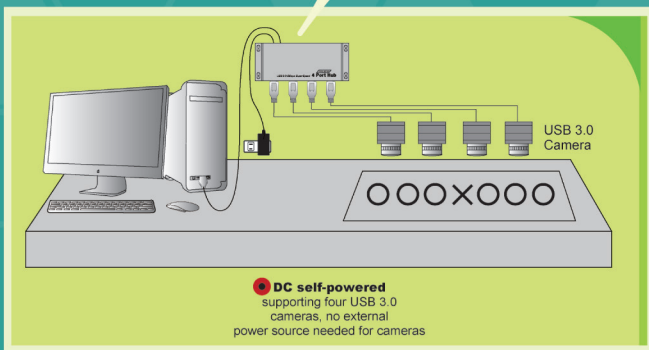
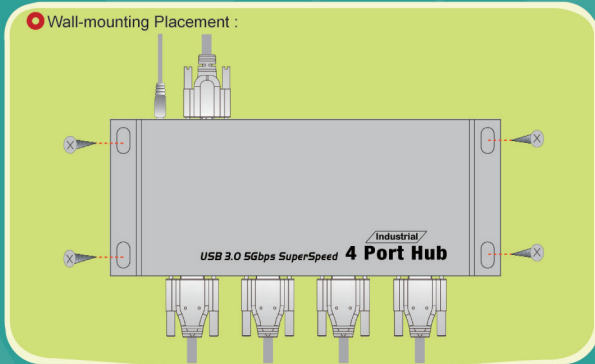
HUB-318

USB 3.0
USB 2.0
USB 1.1
USB 1.0

Industrial 4 Port Hub

Sheet metal construction cabinet

Easily for either Horizontal Placement or Wall-mounting Placement



Accessories



Features

- USB 3.0 SuperSpeed transfer rate of up to 5Gbps
- Backwards compatible with USB 2.0/1.1
- Plug-&Play, hot swappable, no driver required
- USB bus-powered or DC self-powered
- Over current detection and protection for all 4 ports
- LED indicators for Link/AC Power and each device connection status monitoring
- Instant connection to computer through USB port
- Compact design for a small footprint that saves placement space
- Compatible with Windows 8/7/Vista/XP and Mac OS 10.7/10.8
- Dimensions: (L)150 x (W)60 x (H)22mm
- 100% developed/assembly/manufactured in Taiwan

Specifications

| | |
|---------------------|---|
| System requirements | PC or Mac with USB 3.0 port |
| Supported OS | Windows 8/7/Vista/XP and Mac OS 10.7/10.8 |
| Interface | USB 3.0(downwards compatible with USB 2.0/1.1/1.0) |
| Connector | • upstream port: USB 3.0 type B female x 1 • downstream port: USB 3.0 type A female x 4 • DC power jack x 1 |
| Port | 4 |
| Maximum data | 5Gbps transfer rate |
| LED indicator | 5 pcs Link/AC Power x 1, USB port x 4 |
| Power mode | • USB bus-power • DC self-power |
| Power supply | • 5VDC±5%, total mini. 900mA for connected port(s) from connected host USB 3.0 port • 5VDC±5%, each 900mA for connected port(s) from connected host USB 3.0 port and connected power adaptor(O/P:5VDC 3.0A). The power adaptor is bundled with the unit. |
| USB cable | USB 3.0 type A male with locking screws to USB 3.0 type B male with locking screws 2.0m x 1 for connecting the unit with computer. |
| Dimensions | (W)150 x (L)60 x (H)22mm |
| Weight | about 240g |
| Housing | sheet metal chassis |
| Working Environment | • Operating Temperature: 0°C ~ 70°C • Storing Temperature: -25°C ~ 85°C |
| Safety compliance | CE,FCC |
| RoHS | compliant |

USB 3.0 5Gbps SuperSpeed

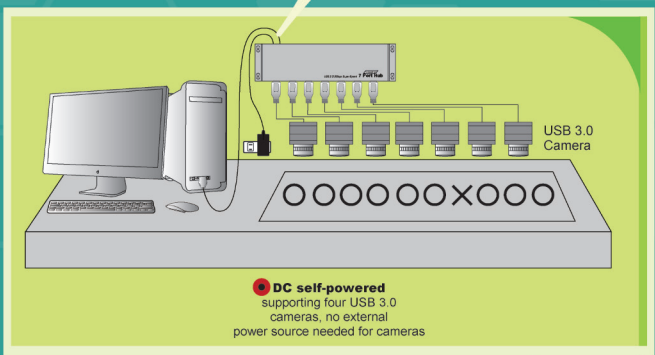
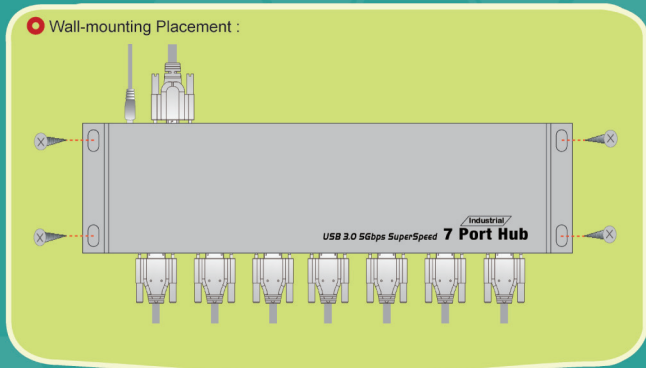
HUB-319

USB 3.0
USB 2.0
USB 1.1
USB 1.0

Industrial 7 Port Hub

Sheet metal construction cabinet

Easily for either Horizontal Placement or Wall-mounting Placement



Accessories



power adapter (O/P: 12VDC 2.5A)



USB 3.0 type A male with locking screws to USB 3.0 type B male with locking screws cable, 2.0m

Features

- USB 3.0 SuperSpeed transfer rate of up to 5Gbps
- Backwards compatible with USB 2.0/1.1
- Plug-&-Play, hot swappable, no driver required
- USB bus-powered or DC self-powered
- Over current detection and protection for all 7 ports
- LED indicators for Link/AC Power and each device connection status monitoring
- Instant connection to computer through USB port
- Compact design for a small footprint that saves placement space
- Compatible with Windows 8/7/Vista/XP and Mac OS 10.7/10.8
- Dimensions: (L)257 x (W)60x (H)22mm
- 100% developed/assembled/manufactured in Taiwan

Specifications

| | |
|---------------------|--|
| System requirements | PC or Mac with USB 3.0 port |
| Supported OS | Windows 8/7/Vista/XP and Mac OS 10.7/10.8 |
| Interface | USB 3.0(downwards compatible with USB 2.0/1.1/1.0) |
| Connector | • upstream port: USB 3.0 type B female x 1 • downstream port: USB 3.0 type A female x 7 • DC power jack x 1 |
| Port | 7 |
| Maximum data | 5Gbps transfer rate |
| LED indicator | 8 pcs Link/AC Power x 1, USB port x 7 |
| Power mode | • USB bus-power • DC self-power |
| Power supply | • 5VDC±5%, total mini, 900mA for connected port(s) from connected host USB 3.0 port • 5VDC±5%, each 900mA for connected port(s) from connected host USB 3.0 port and connected power adaptor(O/P:12VDC 2.5A). The power adaptor is bundled with the unit. |
| USB cable | USB 3.0 type A male with locking screws to USB 3.0 type B male with locking screws 2.0m x 1 for connecting the unit with computer. |
| Dimensions | (W)257 x (L)60 x (H)22mm |
| Weight | about 350g |
| Housing | sheet metal chassis |
| Working Environment | • Operating Temperature: 0°C ~ 70°C • Storing Temperature: -25°C ~ 85°C |
| Safety compliance | CE,FCC |
| RoHS | compliant |

Active Optical Cables

- Extend the limit of USB 3.0 3 meter (10 foot) signals transfer up to 50 meter (164 foot) more!!
- support USB 3.0 data transfer only

▼ Coming with AC/DC power adapter

USB3 A to A Extension : M/F
CBL-U3AOC01-
 10m/15m/20m/30m/40m/50m

Fit for

USB3 Devices

maximum cable length: 3 meters

◀ Coming with AC/DC power adapter

USB3 A to B : M/M
CBL-U3AOC02-
 10m/15m/20m/30m/40m/50m

Fit for

Microsoft XBOX ONE Kinect Sensor

Video Conferencing Camera

USB3 Machine Vision Camera

◀ Coming with AC/DC power adapter

USB3 A to Micro-B : M/M
CBL-U3AOC03S-
 10m/15m/20m/30m/40m/50m

Fit for

USB3 Machine Vision Camera