



BITMAXX

## USB3 LONG DISTANCE CABLES

CEI's USB3 BitMaxx active Plug & Play cable, supporting full 5 gig USB3 throughput and power delivery up to 20 meters with full USB2 backward compatibility. Assembly is NOT to be used in conjunction with other cables.

PART NUMBER REFERENCE: **MVB3 – X – X – X – X XM**

### Select Connector Type: End "A"

Type A, Friction Fit = 1  
Type A, w/Thumbscrews = 2

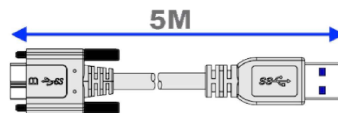
### Select Cable Type:

Extended Distance = 1  
*\*Available lengths: 10, 15 & 20 Meters*  
Robotic / Drag Chain = 2  
*\*Available length: 10Meters*

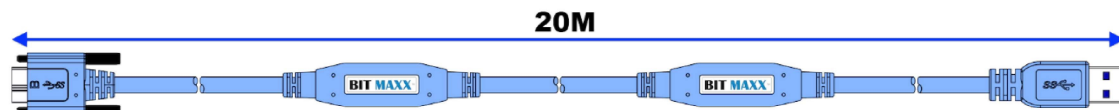
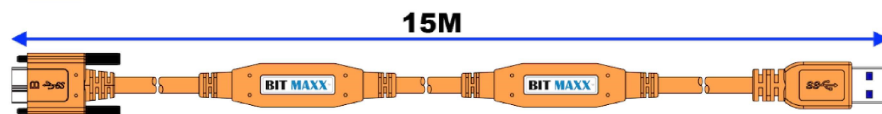
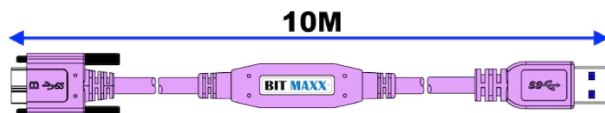
### Select Connector Type: End "B"

Type A, Friction Fit = 1  
Type A, w/Thumbscrews = 2  
Micro B, Straight w/Thumbscrews = 3  
Micro B, R/A Up w/Recessed Screws = 4  
Micro B, R/A Down w/Recessed Screws = 5  
Micro B, Exit Right w/Recessed Screws = 6  
Micro B, Exit Left w/Recessed Screws = 7  
Type B, w/Thumbscrews = 8  
Type B, Friction Fit = 9

### \*Length in Meters: 10, 15, 20



Standard USB3 Vision Cables  
Maximum Length is 5 Meters



**CEI BitMaxx™**  
Extended Distance  
USB3 Vision Cables  
Super Speed USB 3.0  
Available lengths:  
10M, 15M, AND 20M

BITMAXX

## USB3 LONG DISTANCE CABLES



1  
Type A  
Friction Fit



2  
Type A  
W/Thumbscrews



3  
Micro B, Straight  
W/Thumbscrews



4  
Micro B, R/A Up  
W/Recessed Screws



5  
Micro B, R/A Down  
W/Recessed Screws



6  
Micro B, Exit Right  
W/Recessed Screws



7  
Micro B, Exit Left  
W/Recessed Screws



8  
Type B  
W/Thumbscrews



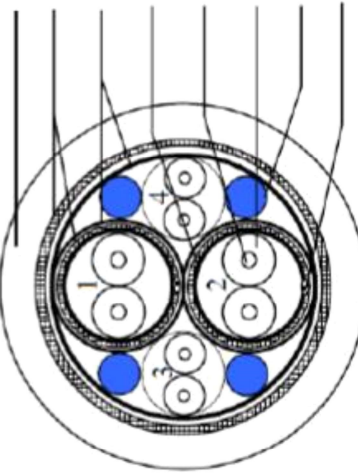

9  
Type B  
Friction Fit

# USB 3.0 BitMaxx Cable Type #: 1

SPECIFICATION:		(1P*24#-DAM)2C+1P*26#-2C*18#+F-AL+B/UL2725	
ITEM		SPECIFICATION	
CONDUCTOR	AWG	24AWG	18AWG
	MATERIAL	TINNED COPPER	TINNED COPPER
	COND.SIZE	7/0.20±0.008MM	43/0.16±0.008MM
INSULATION	MIN.AVG.THICK	0.35MM	0.23MM
	MATERIAL	FM-PE+SKIN	PVC
	O.D	1.35±0.10MM	1.80±0.10MM
DRAIN	N.O.	1P*2	2C
	AWG	24AWG	/
	MATERIAL	TINNED COPPER	/
Face Inside AL.MYLAR	SIZE	7/0.20±0.008MM	/
	COVERAGE	100%	/
	OVERLAP	25% MIN	/
Hot-MYLAR	COVERAGE	100%	/
	OVERLAP	25% MIN	/
	N.O.	(1P+DAM)2C	2C
Face Outside AL.MYLAR	COVERAGE	100%	/
	OVERLAP	25% MIN	/
	MATERIAL	/	/
BRAID COPPER	SIZE	/	/
	MATERIAL	TINNED COPPER	/
	SIZE	24*9/0.10±0.008MM (COVERAGE :85% MIN)	/
JACKET	MIN.AVG.THICK	0.50MM	/
	MATERIAL	PVC	/
	COLOUR	BLACK	/
	O.D	7.50±0.20MM	/
ELECTRICAL CHARACTERISTICS		PHYSICAL PROPERTIES OF JACKET	
USB2.0 UTP		USB3.0 STP*2P	
1. Rating Temperature: 80°C ; VOLTAGE: 30V		1. Differential Impedance: 90±7Ω	
2. Conductor Resistance: at 20°C max		2. Intra-Pair Skew : 15ps /m	
24AWG: 94.2Ω/km, 18AWG: 23.2Ω/km		3. Attenuation/Insertion Loss:	
3. Insulation Resistance: 10MΩ/km min at 20°C dc 500V		1.5dB/1.5M@0.1GHz	
4. Propagation Delay Skew: 100ps (Full-/High-speed only)		5.0dB/1.5M@1.25GHz	
5. Time Delay: 5.2ns/m(max.)		7.5dB/1.5M@2.5GHz	
6. Impedance: 90±1.5%Ω		25dB/1.5M@7.5GHz	
7. Attenuation(Full/High-speed only):		4. Differential to common mode:	
		20dB/cable @ 0.1~7.5GHz	
		5. NEXT:	
		32dB@0.1GHz	
		32dB@2.5GHz	
		23dB@3.0GHz	
		23dB@7.5GHz	
F(MHz)	Attenuation(dB)	F(MHz)	Attenuation(dB)
0.064	0.08	24	0.95
0.256	0.11	48	1.35
0.512	0.13	96	1.90
0.772	0.15	200	3.20
1	0.20	400	5.80
4	0.39		
8	0.57		
12	0.76		
CONSTRUCTION		D.W.G	
JACKET		BRAID COPPER	
MYLAR		MYLAR	
FILLER		FILLER	
CONDUCTOR		CONDUCTOR	
INSULATION		INSULATION	
AL.MYLAR		AL.MYLAR	
DRAIN		DRAIN	
COLOUR CODE:		(1P*24#+DAM)2C:	
1. YELLOW*BLUE		2. ORANGE*PURPLE	
1P*26#: GREEN *WHITE		2C*18#: 1.BLACK 2.RED	
COMPONENTS EXPRESS, INC.		10330 Argonne Woods Drive, Ste100	
Woodridge, IL 60517		(E1013)	
APPROVED		CUSTOMER	
CHECKED		REV	
DRAWING		DATE	
CHEN		2018/5/17	



# USB 3.0 BitMaxx Cable Type #: 2

SPECIFICATION:		(1P*26#+ADBP)2C+1P*26#+1P*24#+FPB				CONSTRUCTION D.W.G	
ITEM		SPECIFICATION					
		26AWG	26AWG	26AWG	24AWG		
CONDUCTOR	AWG	26AWG	TINNED COPPER	TINNED COPPER	TINNED COPPER	JACKET	BRAID COPPER
	COND.SIZE	19/0.10±0.008 mm	0.23 mm	0.23 mm	0.23 mm		Foamed PP film
INSULATION	MIN.AVG THICK	0.23 mm	FM-PE+SKIN	HD-PE	HD-PE	AL FOIL	CONDUCTOR
	MATERIAL	FM-PE+SKIN	HD-PE	HD-PE	HD-PE		INSULATION
Face Outside	O . D	1.20±0.10 mm	0.90±0.05 mm	0.90±0.05 mm	0.95±0.05 mm	FILLER	DRAIN
	N.O.	1P*2	1P	1P	1P		
AL.MYLAR	COVERGE	100%	/	/	/	COLOUR CODE:	
	OVERLAP	25% MIN	/	/	/		
DRAIN	MATERIAL	TINNED COPPER				(1P*26#+ADBP)*2C: 1. YELLOW * BLUE 2. ORANGE * PURPLE  1P*26#: 1. GREEN * WHITE 1P*24#: 1. BLACK RED	
	SIZE	19/0.08±0.008 mm					
BRAID	MATERIAL	TINNED COPPER	/	/	/	COMPONENTS EXPRESS, INC. 10330 Argonne Woods Drive, Ste100 Woodridge, IL 60517	
	SIZE	16*6/0.08±0.008MM	/	/	/		
Foamed PP film	COVERGE	90%MIN	/	/	/	 YS2018111302	
	COVERGE	100%	/	/	/		
Foamed PP film	OVERLAP	25%MIN	/	/	/	APPROVED CHECKED DRAWING	
	N.O.	(1P+ADBP)2C	1P	1P	1P		
BRAID	COVERGE	100%				CUSTOMER REV DATE	
	OVERLAP	25% MIN					
COPPER	MATERIAL	TINNED COPPER				2018/11/13	
	SIZE	16*10/0.08±0.008MM (Coverage : 85%MIN)					
JACKET	MIN.AVG THICK	0.76 mm				PHYSICAL PROPERTIES OF JACKET	
	MATERIAL	MIXING PVC					
COLOUR	PURPLE					ELECTRICAL CHARACTERISTICS	
	O . D	7.00 ± 0.30 mm					
USB2.0 UTP		USB3.0 STP*2P			JACKET		
1. Rating Temperature: 80 °C ; VOLTAGE: 30V		1. Differential Impedance:90±7Ω			1. Differential Impedance:90±7Ω		
2. Conductor Resistance: at 20 °C max		2. Intra-Pair Skew : 15ps /m			2. Intra-Pair Skew : 15ps /m		
26AWG: 150Ω/km;		3. Attenuation/Insertion Loss:			3. Attenuation/Insertion Loss:		
3. Insulation Resistance: 10MΩ/km min at 20 °C dc 500V		1.5dB@0.1GHz			1.5dB@0.1GHz		
4. Propagation Delay Skew:100ps (Full/High-speed only)		5.0dB@1.25GHz			5.0dB@1.25GHz		
5. Time Delay: 5.2ns/m(max.)		7.5dB@2.5GHz			7.5dB@2.5GHz		
6. Impedance: 90±15%Ω		25dB@7.5GHz			25dB@7.5GHz		
7. Attenuation(Full/High speed only):		20dB/cable @ 0.1-7.5GHz			20dB/cable @ 0.1-7.5GHz		
F(MHz)	Attenuation(dB)	F(MHz)	Attenuation(dB)				
0.064	0.08	24	0.95				
0.256	0.11	48	1.35				
0.512	0.13	96	1.90				
0.772	0.15	200	3.20				
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