



ARMOR SERIES | TRINODE

Armor Series TriNodes are versatile single-point source 24V or 48V RGB or RGBW fixtures that can be used to create a unique pixel display or to highlight architectural details. Program with simple SPI (Serial Peripheral Interface) controls for maximum effects. Each TriNode module contains three LEDs (add white LED for RGBW) for precise color gradients and smooth transitions. Choose from flat or globe lenses and customize your pixel spacing and quantity.

- Pinpoint lighting for custom façade displays
- RGB at 19 lm/node (all on)
- RGBW (2700K) at 24 lm/node (all on)
- Flat lens with 110°x110° beam angle
- Globe lens with 160°x160° beam angle
- Uses SPI controls
- Custom pixel spacing (starting at 3.94 in./100 mm)
- Replace single modules for easy maintenance
- Daisy chain up to 492 ft (150 m)
- Use with anodized mounting channel (up to 6 ft 6.74 in./2 m)
Powder coating available (extra charge)
- Single mounting clips
- IP67
- 5-year warranty
- Minimum Ordering Quantity: 50 modules
(TriNode modules can be ordered in multiple strings.
MOQ can include strings with 2 different pitches.)



AVAILABLE COLORS



Custom Pixel Quantities Per String



Custom Spacing



Milky Globe Lens



Clear Flat Lens

ORDERING GUIDE

Category	Input Voltage	Wattage	Colors	Lens	Node Color	Control
NODE3						S
NODE3 - TriNode	24 - 24V DC	0.75 - 0.75 (RGB)	RGB - RGB	CF - Clear Flat Lens	BK - Black	S - SPI
	48 - 48V DC¹	1.0 - 1.0 (RGBW)	RGB27 - RGBW (2700K)	GM - Milky Globe Lens	BG - Beige	

- Note:**
1. 48V recommended for runs with more than 102 TriNodes (see chart at bottom of page 5 and 6)
 2. Specify spacing and quantity for custom mounting channel.
 3. Be sure to use wire end caps at end of line.

ACCESSORIES:

1. M20E 5-Pin Female to Bare Wire Input Cable
M20CBLFB5PIN1000 (3 ft, 3.3 in. | 1 m)
M20CBLFB5PIN2000 (6 ft, 6.7 in. | 2 m)
M20CBLFB5PIN3000 (9 ft, 10 in. | 3 m)
2. M20E 5-PIN Male to Female Jumper Cable
M20JUMPMF5PIN1000 (3 ft, 3.3 in. | 1 m)
M20JUMPMF5PIN2000 (6 ft, 6.7 in. | 2 m)
M20JUMPMF5PIN3000 (9 ft, 10 in. | 3 m)
3. M20E 5-PIN Power Cable, Single Feed (59 in. | 1.5 m)
M20PYCBL5PIN1500
4. M20E 5-PIN Power Cable, Double Feed (59 in. | 1.5 m)
M20PYCBLD5PIN1500
5. M20E 5-PIN Power & Data Injector Cable (59 in. | 1.5 m)
M20YCBLP5PIN1500
6. M20E Input Cable, RJ45 to Female
M20CBLRJ45F5PIN15000 (49 ft | 15 m)
M20CBLRJ45F5PIN30000 (98 ft | 30 m)
M20CBLRJ45F5PIN50000 (164 ft | 50 m)
7. End Cap
M20EC5PIN
8. Mounting Clip
NODEMC
9. Mounting Channel (up to 78.74 in. | 2 m)
CHNODESV

CONTROLLERS:

1. C4 Extended Controller
Part # for 1 universe model: CTRLPIXEL1
Part # for 2 universe model: CTRLPIXEL2
Part # for 4 universe model: CTRLPIXEL4
Part # for 8 universe model: CTRLPIXEL8
2. C4 Live Controller
Part # for 4 universe model: CTRLPIXELLIVE4
Part # for 8 universe model: CTRLPIXELLIVE8
Part # for 12 universe model: CTRLPIXELLIVE12
Part # for 16 universe model: CTRLPIXELLIVE16
Part # for 24 universe model: CTRLPIXELLIVE24
3. PxLNet Controller
Part #: CTRLPIXEL96

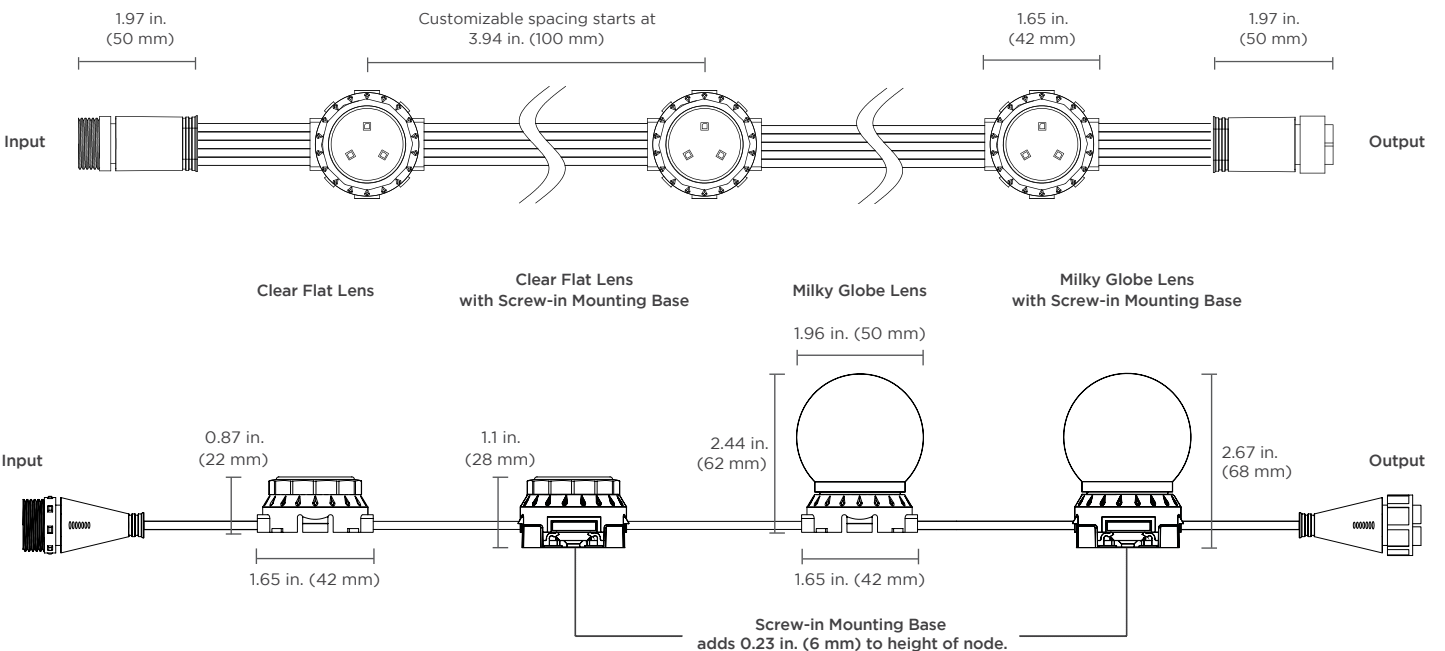
DRIVERS:

1. 24V 60W Non-dimmable Driver
Part #: DRVW2460
2. 24V 96W Non-dimmable Driver
Part #: DRVW2496
3. 48V 60W Non-dimmable Driver
Part #: DRVW4860
4. 48V 96W Non-dimmable Driver
Part #: DRVW4896

SPECIFICATIONS / DIMENSIONS / LUMEN DATA

Operating Voltage	24V DC, 48V DC Note: 48V recommended for runs with more than 102 TriNodes (see chart at bottom of page 5 and 6)			
Color / Temperature	RGB		RGBW (2700K)	
Power Consumption	0.75 W		1.0 W	
LED per Node	3 LEDs		4 LEDs (3x RGB + 1x White)	
Lumen Output	19 lumens per node		24 lumens per node	
IC Code	16-bit (Default) UCS8903	8-bit (Optional) UCS2903	16-bit (Default) UCS8904	8-bit (Optional) UCS2904
LED Beam Angle	Clear Flat Lens: 110°x110° Milky Globe Lens: 160°x160°			
LED Pitch	Customizable, starting from 3.94 in. (100 mm)			
Max. Daisy Chain Connections	492 ft 1.51 in. (150 m) including extension cables			
Minimum Order Quantity	Minimum Ordering Quantity: 50 modules (TriNode modules can be ordered in multiple strings. MOQ can include strings with 2 different pitches.)			
Storage Temperature	-22° F to 176° F (-30° C to 80° C)			
Operating Temperature	-4° F to 158° F (-20° C to 70° C)			
Connector	5-pin Connector			
Lens Options	Flat Clear Lens Cap, Milky Globe Lens Cap			
Protection Rating	IP67			
Mounting Options	Screw-in Mounting Base, Mounting Channel			
Certifications	ETL, CE, RoHS			
Fixture Color Finish	Black, Beige			
Dimensions (WxH)	1.65 x 0.87 in. (42 x 22 mm)			
Weight per Node	0.64 oz. (18 gm)			
Warranty	5 Years			

DIMENSIONS



MOUNTING HARDWARE

MOUNTING CHANNEL (PART #: CHNODESV)
Mounting Channel length up to 78.74 in. (2 m)

1.65 in. (42 mm)

2.08 in. (53 mm)

Installation with Clear Flat Lens

Installation with Milky Globe Lens

SCREW-IN MOUNTING BASE (PART #: NODEMC)

0.197 in. (5 mm)

0.67 in. (17 mm)

0.24 in. (6 mm)

1.57 in. (40 mm)

1.57 in. (40 mm)

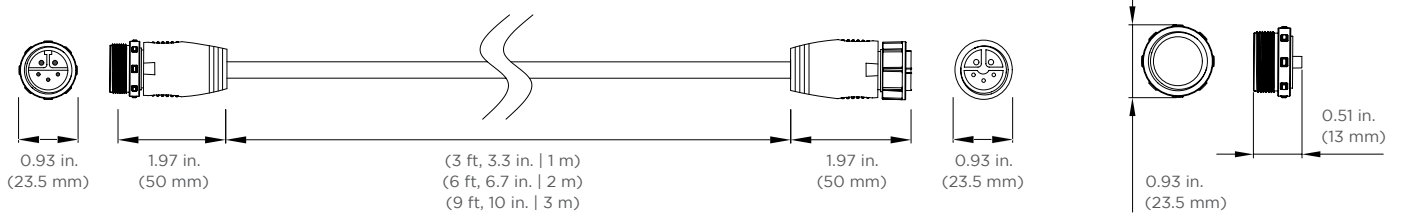
Installation

Clips fit aircraft cable

ACCESSORIES

Part #:
M20JUMPMF5PIN1000 (3 ft 3.3 in. | 1 m)
M20JUMPMF5PIN2000 (6 ft 6.7 in. | 2 m)
M20JUMPMF5PIN3000 (9 ft 10 in. | 3 m)

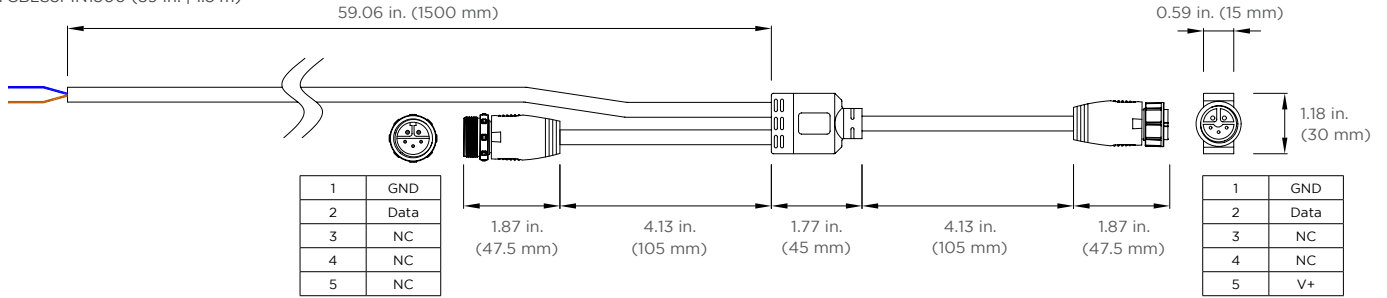
Part #: M20EC5PIN



ACCESSORIES

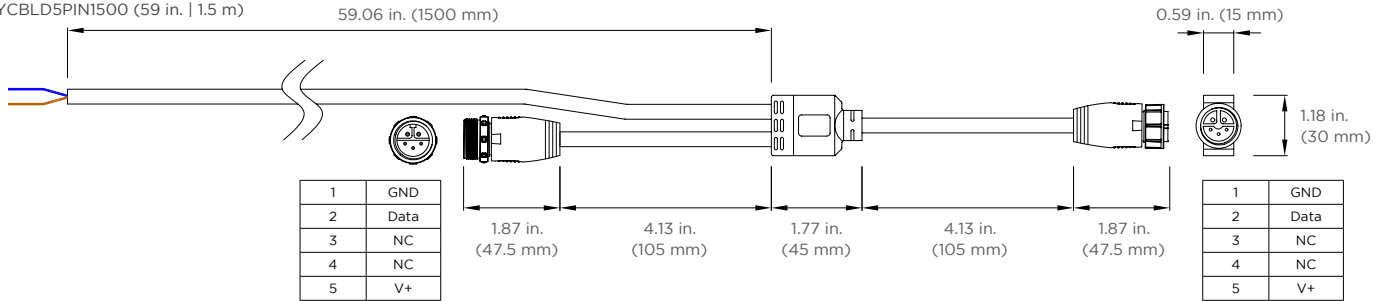
M20E 5-PIN POWER CABLE, SINGLE FEED

Part #:
M20PYCBL5PIN1500 (59 in. | 1.5 m)



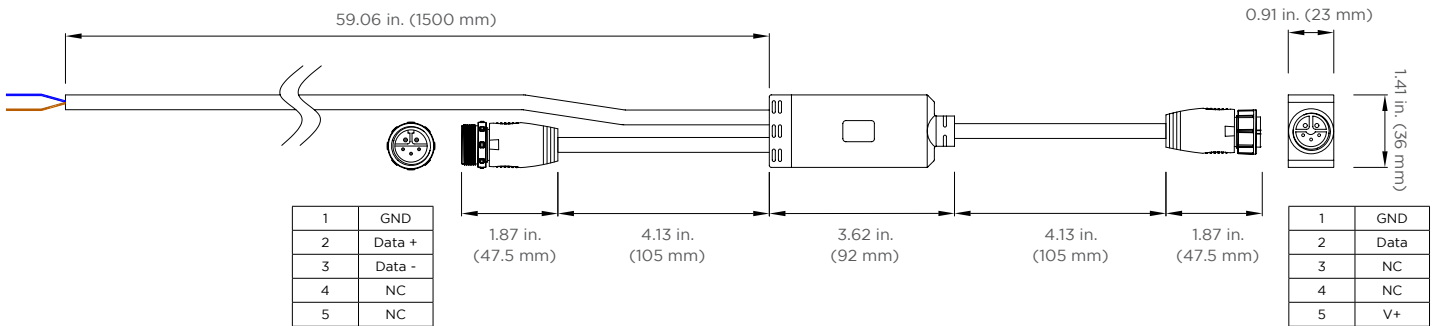
M20E 5-PIN POWER CABLE, DOUBLE FEED

Part #:
M20PYCBLD5PIN1500 (59 in. | 1.5 m)



M20E 5-PIN POWER & DATA INJECTOR CABLE

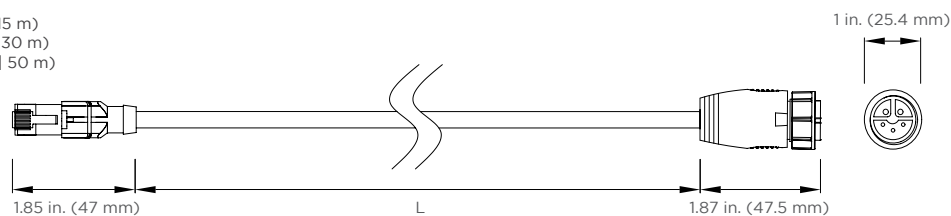
Part #:
M20YCBLP5PIN1500 (59 in. | 1.5 m)



M20E 5-PIN INPUT CABLE, RJ45 TO FEMALE

Part #:
M20CBLRJ45F5PIN15000 (49 ft | 15 m)
M20CBLRJ45F5PIN30000 (98 ft | 30 m)
M20CBLRJ45F5PIN50000 (164 ft | 50 m)

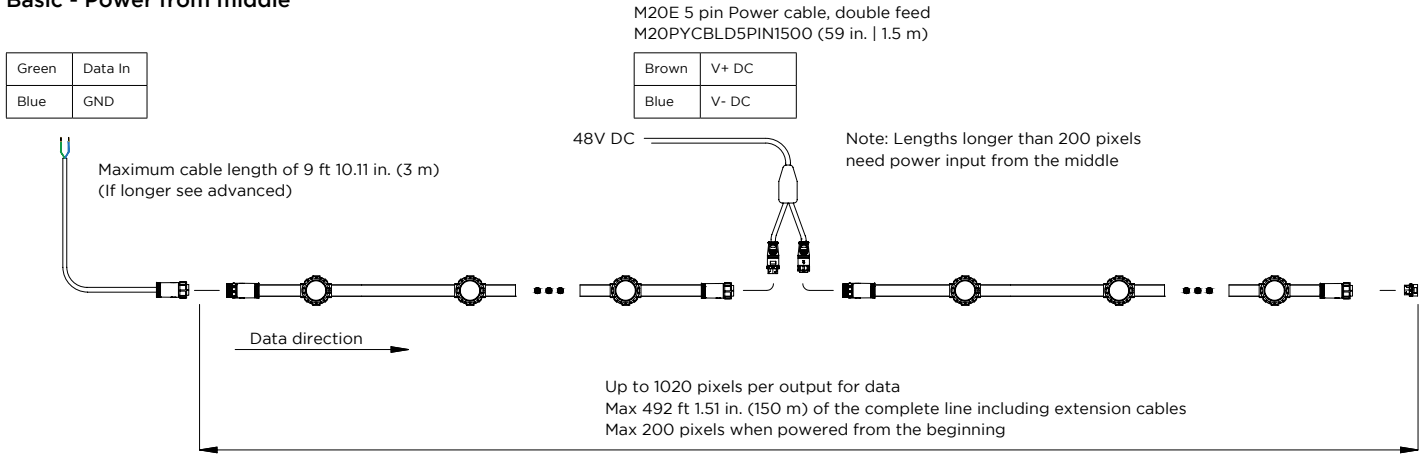
RJ45		
1	Orange/White	Data +
2	Orange	Data -
3	Green/White	Not used
4	Blue	Not used
5	Blue/White	Not used
6	Green	Not used
7	Brown/White	GND
8	Brown	GND



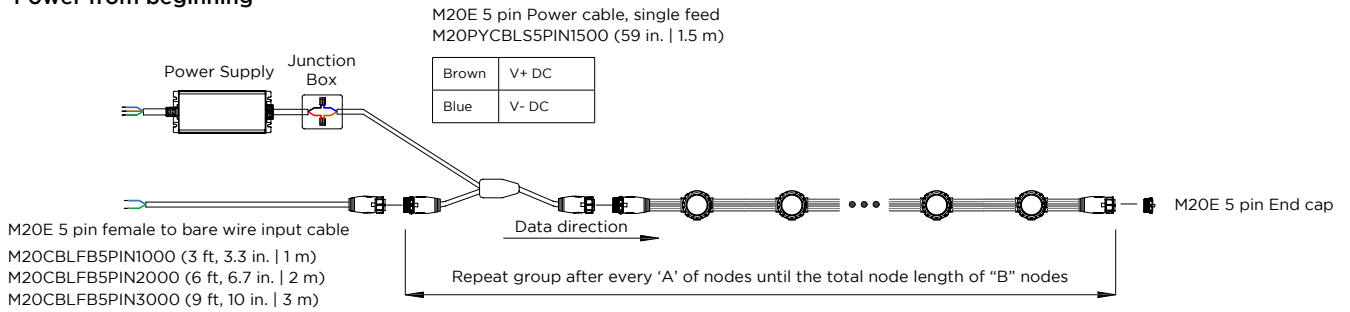
M20E 5-Pin Female	
1	GND
2	Data -
3	Data +
4	NC

CONNECTION

Basic - Power from middle



Basic - Power from beginning



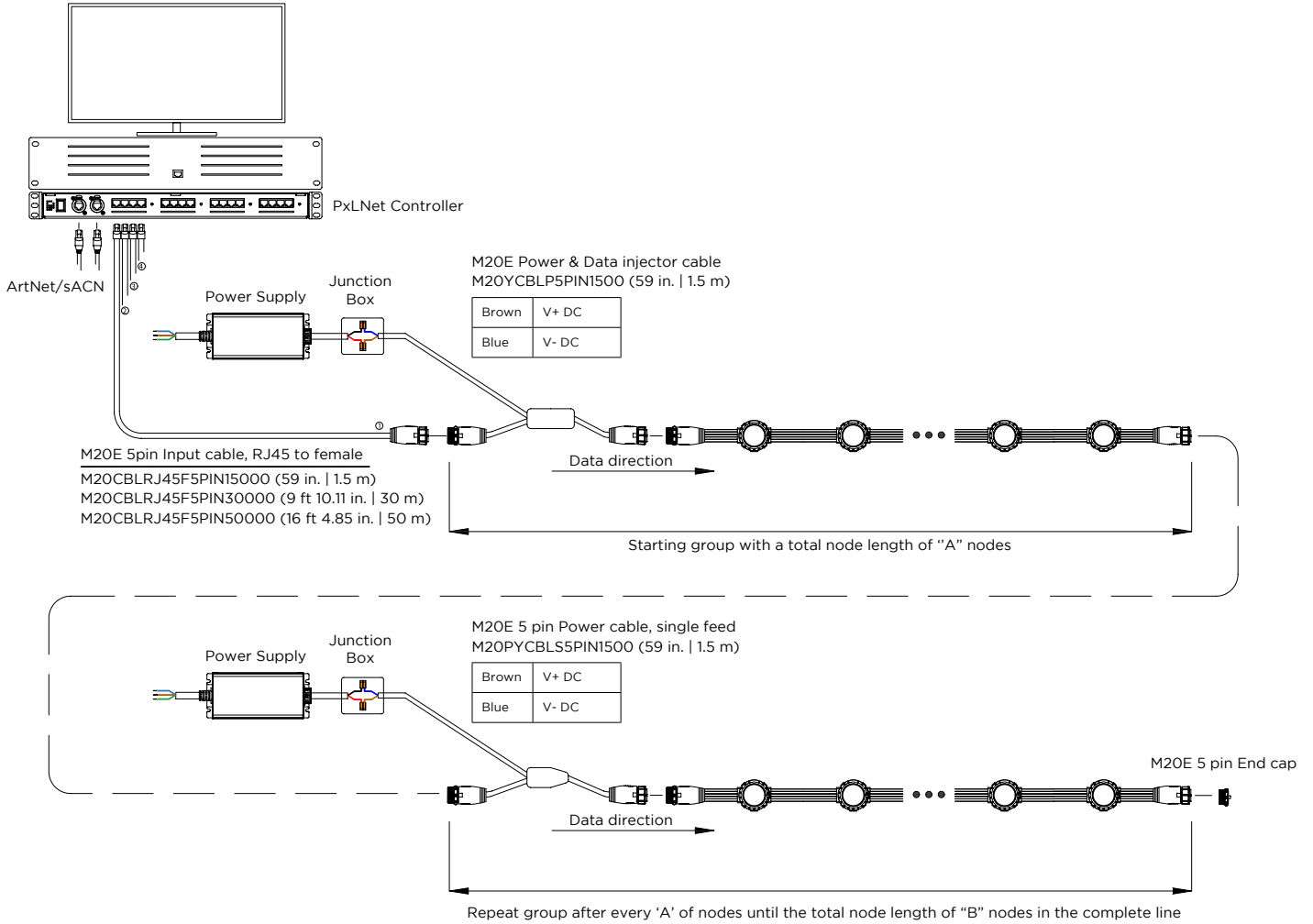
Green	Data In
Blue	GND

Model	Voltage	A	B @25fps	B @50fps	Bit
TriNode RGB	48V	170	1020	510	8
TriNode RGBW	48V	128	768	384	8
TriNode RGB	24V	102	1020	510	8
TriNode RGBW	24V	102	768	384	8

Default nodes per string: 34 nodes (Customizable)
Default spacing: 7.87 in. / 200 mm (Customizable)

CONNECTION

Advanced



Model	Voltage	A	B @25fps	B @50fps	Bit
TriNode RGB	48V	170	1020	510	8
TriNode RGBW	48V	128	768	384	8
TriNode RGB	24V	102	1020	510	8
TriNode RGBW	24V	102	768	384	8

Default nodes per string: 34 nodes (Customizable)
Default spacing: 7.87 in. / 200 mm (Customizable)