DCE/2178SMEE Super Mini Ethernet Extender

Data Connect 2178SMEE Super Mini Ethernet Extender is an excellent choice for Ethernet Extender applications where space and size are an issue. The DCE/2178SMEE offers new performance standards for the growing demand for high speed transmission of full bandwidth Ethernet and high-power PoE over extended distances on Twisted Pair or Coax. The 2178SMEE is designed to be integrated into existing products or to easily fit in standard 4 x 4 and J-Boxes, providing weatherproofing and compliance with fire and other environmental requirements. The symmetrical bandwidth assures full bandwidth transmission to be maintained over the entire operational distance for both uploads and downloads with virtually no packet loss.

The Data Connect 2178SMEE utilizes pass through PoE that eliminates the need for additional remote site power while allowing a single PoE source, such as a PoE network switch, to provide power to both transceivers and the camera. The 2178SMEE can pass through PoE power, up to 60W. Type tested under NEMA-TS2 environmental standards for extended temperature operation between -40°C to +75°C. The 2178SMEE is the perfect solution for extended distance data and power transmission for warehouses, parking lots, campuses, casinos, and many more.
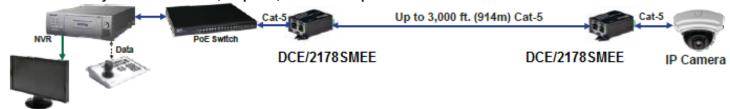
The Data Connect 2178SMEE is Low Voltage and can easily fit inside most cameras housing and junction boxes. Best of all, it is type tested to network packet performance standards, and major camera brand compatibility tested to assure you error free and reliable.   Installation cost savings, proven performance, and major camera brand compatibility all go into making the 2178SMEE's the best choice for extended distance data and power transmission.

FEATURES

- Extends Ethernet beyond 328 feet (100 m) limitation up to 3,000 feet (914 m) over Twisted Pair cables.
- Compact, design, fits inside 4 x 4 and J-Box enclosures.
- Able to fit inside weatherproof and plenum rated enclosure.
- Requires no switch setting or network programming.
- Pass through PoE compatible with 802.3af, 802.3at and PoE++ up to 74W.
- High data rate, ideal for high bandwidth requirements of Mega-pixel cameras, multiple IP cameras systems, and cameras requiring Jumbo Frame transmission.
- Symmetrical Bandwidth provides consistent upload and download with virtually no packet loss.
- Type tested to RFC-2544 TCP/IP network bandwidth packet transmission standards.
- Supports one-pair or four-pair Twisted Pair wires with built-in transceiver cable connectivity tester.
- Type tested for -40°C to +75°C temperature range under conforming to NEMA-TS2 testing standards.
- Removable wings provide easy mounting.
- Complies with major IEEE standards and RFC network protocols for UDP, TCP/IP, and HTTP & HTTPS.

APPLICATIONS

- Extending Ethernet distances beyond Ethernet 100 m limit
- Retrofit Twisted Pair analog CCTV installations into Digital system
- Providing high power PoE to PTZ cameras at long distances
- CCTV System for Casinos, Airports, School Campuses

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SPECIFICATIONS

Electrical
Ethernet Interface:	Standard 10/100BaseT
Data Rate:	Auto select 10/100 Mb/s Full speed / full duplex at maximum rated distance
Twisted Pair:	100 Ohm +/- 20%, Cat5 or better
	10BaseT: up to 3,000 ft. (914 m)
	100BaseT: up to 2,100 ft. (640 m)
Power Supply:	12 VDC, 1.8 W with POE AF/AT & 1.5 W with external power supply
Status LEDs:	Power On
	Standard Ethernet: Traffic, Link
	Extended Ethernet: Traffic, 10/100BaseT
Connectors:	Ethernet Interface: RJ-45 Connector
	Extended Interface: RJ-45 Connector
	Power: 2-pin Terminal Block
RFC:	2544 TCP/IP Packet Transmission
Compatible with:	IEEE 802.3af PoE, IEEE 802.3at PoE
RFC:	768 UDP, 2068 HTTP, 793 TCP 791 IP, 1783 TFTP, 894 IP over Ethernet
PoE Compatibility:	IEEE 802.3af, IEEE 802.3at
Jumbo Frame Support:	Yes

Regulatory
FCC:	Part 15, Sub
Emissions:	EN 5502:2006+A1:2007, EN 61000-3-2:2006+A1:2009+A2:2009 EN 61000-3-3:2008, EN 55024:1998+A1:2001+A2:2003
Safety:	CE
Environmental:	RoHS

Environmental
Humidity:	0 to 95%, non-condensing
Temperature:	Operating: -40°C to +75°C per NEMA-TS2 testing
	Storage: -40°C to +85°C

Mechanical
Dimensions:	0.97x1.75x2 in., 2.5x4.4x5 cm (H x W x L)
Weight:	0.15 lb, 67 g
Material:	Extruded Aluminum

Accessories
12 VDC wall-mount power supply (optional)

Data and PoE Distance [2]

Data Rate	4-Pair [3] (Data + PoE class 2)	1-Pair (Data only)
10BaseT	n/a	3,000 ft. (914 m)
100BaseT	2,100 ft. (636 m)	1,000 ft. (303 m)

1. Specifications subject to change without notice.
2. Distance figures are obtained using in house testing mirroring installations. Factors such as cabling, connections, use of power and environmental conditions may affect actual distances and should be taken into consideration.
3. Specifications reflect operating using Pass Through PoE (PTP™) providing power for both transceivers and camera from a single source. Distances may increase if transceivers are locally powered.

ORDERING INFORMATION

DCE/2178SMEE-T	Single Port Super Mini Ethernet Extender Twisted Pair
DCE/2178SMEE-C	Single Port Super Mini Ethernet Extender COAX

Left View · Top View · Right View · Mounting Pattern