



PRODUCT SPECIFICATIONS

TraceNet DCD™

DATA COMMUNICATION DEVICE

APPLICATION

The TraceNet™ Data Communication Device (DCD) is specifically designed to efficiently facilitate the rapid communication from heat tracing controllers across a wide spectrum of computer networks. Through adaptive and agile programming, the DCD is able to coordinate the information flow from up to a hundred controllers per serial port and disperse it to any number of operator and Distributed Control System (DCS) workstations.

The DCD functions by acting as a dedicated headless industrial data communication device that communicates via MODBUS communication protocol to a variety of Thermon temperature control and monitoring devices. The DCD collects data from the modules from either its built-in RS-485 serial ports or its Ethernet port and distributes that information to specified operator workstations and data centers. It can be configured to communicate through various MODBUS protocols, including MODBUS TCP and MODBUS RTU over RS-485.

TraceNet DCD is fully buffered, containing a complete set of memory maps of all Thermon Controllers in its RAM for fast, simultaneous communication to multiple MODBUS TCP clients. Through use of its read-only hard-drive for its operating system and its read/write FLASH RAM for configuration settings, the TraceNet DCD can be quickly configured to support any network design and rapidly improve existing communication systems. The TraceNet DCD features a rugged design and a small footprint, ideal for use indoor and in outdoor enclosures of NEMA 4, 4X, and 12.

RATINGS

TraceNet DCD is a family of microprocessor based data communication devices with the following specifications:

Nominal Supply Voltage.....	24 VDC
Input /Output Ports	
DCD-3	
.....	10/100/1000, Ethernet, 4 USB 2.0, 3 x RS-485, 1 x CAN
DCD-1	
... ..	10/100/1000, Ethernet, 2 USB 2.0, 4 x RS-485 (COM 1-4)
Maximum Storage Temperature	185°F (85°C)
Minimum Storage Temperature	-40°F (-40°C)
Operating Ambient Temperature Range	
DCD-3.....	-40°F (-40°C) to 158°F (70°C)
DCD-1.....	-4°F (-20°C) to 158°F (70°C)

ModBus Serial Communications

Up to 247 ModBus devices can be connected to the RS-485 serial ports up to a distance of 4000 feet (1220 m).



PRODUCT FEATURES

- Modules are available to operate TCP or UDP over Ethernet in ambient conditions ranging from -40°F (-40°C) to 158°F (70°C).
- Serves MODBUS data simultaneously to multiple TCP clients such as DCS/SCADA or TraceNet Command.
- Robust with field proven performance reliability.
- Power cycle tested with auto restart on error.
- Remotely configurable from anywhere on the network.
- DIN rail mountable.

CERTIFICATIONS

The DCD-3 is for use in indoor and outdoor applications and has the following hazardous location certifications:

- Ordinary Locations
- Hazardous Locations
- IEC/EN/UL/CSA 60950-1 E114023
- CI I, Div 2, Gp ABCD T4;
- CI I, Zone 2, AEx nA IIC T4 Gc;
- Ex nA IIC T4 Gc;
- CE Ex II 3 G Ex nA IIC T4 Gc;
- IECEx EMT17.0009X Ex nA IIC T4 Gc; -40°C ≤ Ta ≤ 70°C



The DCD-1 is for use in indoor applications and ordinary classified locations.

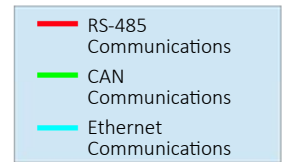
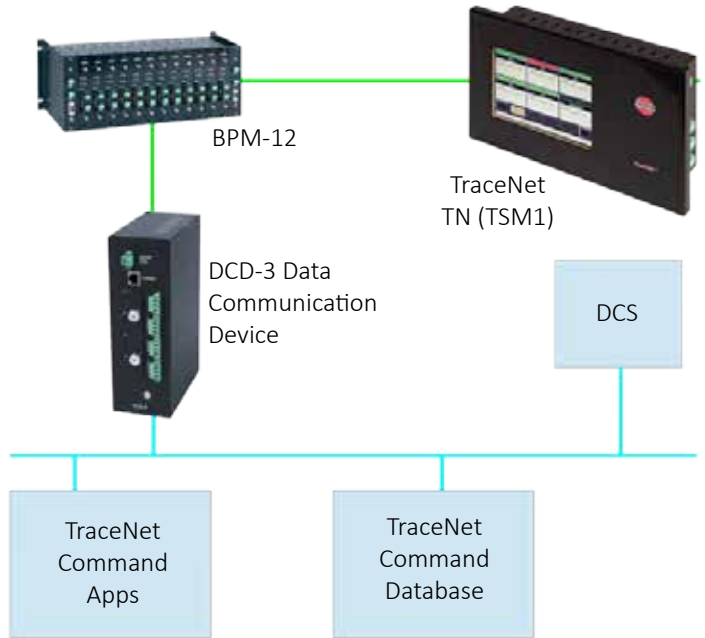


PRODUCT SPECIFICATIONS
TraceNet DCD™
 DATA COMMUNICATION DEVICE

DIMENSIONS



TYPICAL TN SERIES COMMUNICATION NETWORK



TYPICAL TCM-18 SERIES COMMUNICATION NETWORK

