Mini-Transceivers



FEATURES

- **Complies with IEEE 802.3 Standard and is Compatible with Ethernet Version 1.0 and 2.0**
- **Provides Full Set of LED Indicators for Status and Local Network Traffic Information**
- **Offers Switch-Selectable Operating Parameters for Custom Configurations**
- **Supports Twisted Pair, ThinNet, and Fiber Network Cabling Requirements**
- **Compact, Rugged Metal Case**

DESCRIPTION

The Magnum family of Mini-Transceivers offers cost-effective connectivity for twisted pair (RJ-45), ThinNet (BNC) and fiber (multi-mode and single-mode) network media from any workstation or device configured with an Ethernet AUI port. Their compact size permits installation even in tight spaces. Each unit is compatible with Ethernet V1.0 and V2.0, and compliant with IEEE 802.3 standards

For RJ-45, BNC, and fiber applications, the user has a choice of the TP1A, CT1A, and FT1A models. Both of the twisted pair models have shielded RJ-45 ports. Both of the fiber units support multi-mode fiber for FOIRL and 10BASE-FL links. The FT10 unit supports single mode fiber for very long fiber cable distances.

Micro switches on the full-featured Magnum Mini-Transceivers simplify the job of network set-up by supporting a variety of configurations. All units feature a full complement of built-in LED indicators (see table on back) that display essential diagnostic and network segment status information.

Magnum Mini-Transceivers are designed to provide low-temperature operation over extended periods, making them some of the most reliable in the industry. Their high-strength fabricated metal packaging shields against Radio Frequency Interference (RFI) and Electromagnetic Interference (EMI). All Magnum Mini-Transceivers are FCC and VDE compliant. Like all Magnum Ethernet connectivity products, they are designed and manufactured in the USA.

SPECIFICATIONS

PERFORMANCE

Data Rate

10 Mbits / second

Network Standards

Ethernet V1.0/V2.0, IEEE 802.3; 10BASE-T, 10BASE2, 10BASE5, DTE, FOIRL, 10BASE-FL

Maximum Standard Ethernet Lengths

DTE (AUI drop cable)	50m
10BASE-T (twisted pair)	100m
Shielded Twisted pair	150m
10BASE2 ThinNet	185m
10BASE5 ThickNet	500m
FOIRL mm Fiber Optic	1.0Km
10BASE-FL mm Fiber Optic	2.0Km
Single-mode Fiber Optic	10.0Km

OPERATING ENVIRONMENT

Ambient Temperature

32° to 120°F (0° to 50°C)

Storage

-20°C to 60°C

Ambient Relative Humidity

10% - 95% (non-condensing)

Note: Shielded 10BASE-T connectors accept either unshielded or shielded wiring plugs for standard twisted pair media wiring.

Packaging

Mounts on AUI connector with slide-lock, designed for thin “Sun-size” slots

Enclosure

High-strength sheet metal

Dimensions

FT10:	1.6 in H x 2.5 in W x 0.63 in D (4.0 cm x 6.4 cm x 1.6 cm)
TP1A:	1.5 in H x 2.9 in W x 0.8 in D (4.2 cm x 6.0 cm x 1.9 cm)
CT1A:	1.5 in H x 2.9 in W x 0.8 in D (4.2 cm x 7.4 cm x 1.9 cm)
FT1A:	1.6 in H x 2.8 in W x 0.63 in D (4.0 cm x 7.0 cm x 1.9 cm

Weight

TP1A	2.3 oz (67g)
CT1A	2.8 oz (81G)
FT10	2.5 oz (79 g)
FT1A	2.7 oz (75g)

Cooling Method

Convection

CONNECTORS

AUI (all models)

D-Sub 15 male, connector with locking posts

RJ-45 twisted pair Port (TPs)

Eight-Pin Female shielded

BNC Port (CTs)

Standard BNC female RG-58 ThinNet

Fiber Port (FTs)

Std multi-mode, ST-type

Fiber Port (FT10)

Single mode, ST -type

Agency Approvals

UL Listed (UL1950), CSA Certified

Emissions

Meets FCC Part 15 Class A, VDE Class B

SPECIFICATIONS CONT.

Switch Settings

Switch	CT1A	CT1A	FT1A FT10	Description
SQE	X X	X X	X X	The ON position enables the SQE test function
LINK	X -	- -	- -	The ON position enables 10BASE-T signaling requirements. When OFF, TP1 is configured for Starlan 10 networks
AUTO POL	X -	- -	- -	The ON position enables automatic correction for reversed polarity
RED SQUELCH	X -	- -	- -	Reduced Squelch. ON supports STP (shielded twisted pair); OFF supports UTP

Led Indicators

LED	TP1A	CT1A	FT1A/FT10	Description
LINK	X X	- -	X X	Steady on shows the connection is made at both ends and segment is ready
RX	X X	- -	X X	Indicates attached host is receiving data from cable
COL	X -	- -	X -	Indicates transceiver is simultaneously transmitting receiving from the cable
POL	X -	- -	- -	Indicates transceiver has detected a receive data wire-pair signal inversion
TX	X X	- -	X X	Indicates attached host is transmitting data over the cable
PWR	X X	X X	X X	Indicates transceiver is receiving DC power.
SQE	X -	X X	X X	Indicates SQE is enabled
JAB	- -	- -	X -	Indicates a Jabber condition (illegal packet length fault)

ORDERING GUIDE

Model TP1A

AUI to twisted pair Mini-Transceiver

Model CT1A

AUI to BNC Mini-Transceiver

Model FT1A

AUI to multi-mode fiber (ST) Mini-Transceiver

Model FT10

AUI to single mode fiber (ST) Mini-Transceiver

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