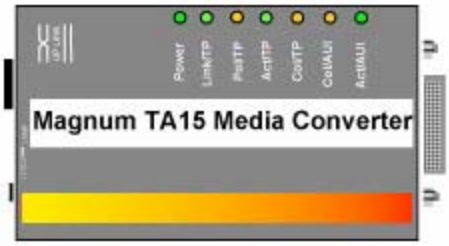
# Magnum TA15

**Twisted Pair to AUI Ethernet Media Converter, with 1 RJ-45 and 1 female AUI connector**

## *Features*

- **RJ-45 to AUI**
- **10 Mb Data Rate**
- **Full set of LEDs**
- **Rugged Packaging**




## Datasheet and User Guide

The Magnum™ TA15 Media Converter provides a connection between a twisted pair segment and any female Attachment Unit Interface (AUI) with slide latch. An external power supply provides power for the TA15 and for any attached mini-transceivers. Therefore, any Ethernet transceiver with a standard male AUI interface can be connected to the TA15 through the AUI connector—providing a connection from a twisted pair segment to other Ethernet media types. Media converters cost less than full Ethernet repeaters and can be used whenever media distance limitations will not be exceeded in the new cabling structure.

The Magnum TA15 is part of the family of Magnum Media Converters. For 10 Mb, these include the models TB14 and TB14H (hardened) twisted pair to ThinNet, TF14 (twisted pair to multi-mode fiber), TF14s (twisted pair to single-mode fiber), and BF15 (ThinNet to multi-mode fiber). Models for 100 Mb include the 14E (office) and the 14EH (hardened) twisted pair to multi-mode fiber as well as the single-mode fiber versions.

The Magnum TA15 Media Converter may be combined with various other transceivers to provide media conversion flexibility. These "Media Conversion Combos" include twisted pair to fiber (single and multi-mode) and ThinNet to twisted pair and are defined in the table on the back of this page.

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# Specifications

**Performance:**
Data Rate: 10 Mbps

**Additional Features:**
Each TA15 converter features a full set of LEDs that conveys essential diagnostic and status information on each port. There are 4 LEDs for TP (Link, Polarity, Activity, Collision), 2 for AUI (Activity, Collision), and 1 common (PWR). An Up-link switch on the TP port allows the TA15 to be used in any application without the need for a cross-over cable. The case is rugged metal.

**Network Standards:**
Ethernet V1.0 / V2.0 IEEE 802.3; 10BASE-T

**Operating Environment:**
Ambient Temperature: 32-120°F; (0-50°C);
Storage: -20°C to 60°C;
Ambient Relative Humidity: 10%-95% (non-condensing)

**Packaging:**
Enclosure: High strength metal, designed for wall-mounting, or closet shelf, or desktop
Dimensions:[2.7x 1.65x 0.75] in [6.9x 4.2 x 1.9] cm
Weight: 4 oz (115 g); power supply: 10oz (2285 g)

**Power Supply:**
Power Input Voltage: 95-125 vac at 60 Hz for "-d" Models, 200-250 vac at 50 Hz for "-i" Models

**Agency Approvals:**
UL Listed (UL 1950), cUL, CE;
Emissions meet FCC Part 15, Class A

**Warranty:** Three years Made in USA

**Media Distance Limitations:**
Media converters do not extend media distances (and do not add to the hop count), as repeaters do. The cable segment length on each side of a media converter is measured as a percentage of the maximum allowable standard media distance for the given media type, and the percentages when added together must not exceed 100%. See GCI's "Installation and User Guide for Magnum Media Converters" manual (available on the GarrettCom website at www.GarrettCom.com) for cable distance limitations and distance calculation examples.

**Media Conversion Options:**
An AUI drop-cable may be connected to the AUI port. Alternatively, connecting a mini-transceiver to the AUI port on the Magnum TA15 will greatly expand the range of media converter options available. For example, combining a Magnum FT1 Mini-Transceiver with the TA15 will provide a conversion between twisted pair and multi-mode fiber (see Figure 1 below). Similarly, combining a TA15 with a CT1 will provide a conversion between twisted pair and ThinNet. The Chart below describes the range of combinations.

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| LED | Description |
|---|---|
| Power | Indicates unit is receiving power |
| Link/TP | Steady ON when the connection is made at the twisted pair end |
| Pol/TP | Indicates that a receive data wire-pair signal inversion has been detected on the twisted pair port |
| Act/TP | Indicates activity has been detected on the twisted pair port |
| Col/TP | Indicates unit is simultaneously transmitting and receiving on the twisted pair port |
| Col/AUI | Indicates unit is simultaneously transmitting and receiving on the AUI port |
| Act/AUI | Indicates activity has been detected on the AUI port |

## Ordering Information

| Model | Description |
|---|---|
| TA15-d | Media Converter, twisted pair to AUI with external 95-125 vac at 60 Hz power supply. |
| TA15-i | Same as TA15-d but with external 200-250 vac at 50 Hz power supply. |

| *Product Combination* | *Description* | *Media Conversion* |
|---|---|---|
| Magnum TA15 + Magnum CT1 | TA15 + CT1 mini-transceiver | 10BASE-T-to-10BASE2 |
| Magnum TA15 + Magnum FT1 | TA15 + FT1 mini-transceiver | 10BASE-T-to-10BASE-FL (multi-mode) |
| Magnum TA15 + Magnum FT10 | TA15 + FT10 mini-transceiver | 10BASE-T-to-single-mode fiber |

Note: When using transceivers, switch the SQE on them to the OFF position.

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