10 Mbps Ethernet MicroTransceivers

Networking The World Since 1988

IMC Networks' line of miniature IEEE 802.3 Ethernet MAU/transceivers enable devices equipped with an AUI Ethernet interface, but not equipped for fiber optic, twisted pair or thin coaxial cabling, to make connections in virtually any Ethernet installation.

The small size of the MAU/transceiver allows the 15-pin D-type connector to be attached directly to the AUI port found on most Ethernet-compatible computers, terminals and Ethernet network interface cards.

Fiber optic transceivers are uniquely designed with the fiber connectors at a right angle from the AUI connector. With the cables coming off the side of the transceiver, the user can install them in locations with minimal space, such as an enclosed rack with doors, without fear of damaging the fiber connection.

Each MAU/transceiver features switch-selectable SQE Heartbeat and diagnostic LEDs. Power is supplied to the transceiver via the AUI port, eliminating the need for an external power supply.

Fiber Optic Transceivers

- IEEE 802.3 (ISO/IEC 8802-3)10Base-FL and single-mode fiber compliant
- Support of Half- or Full-Duplex
- Support of multi-mode or single-mode fiber

- Single-mode can support distances in excess of 20 km
- Fiber connectors located at 90° angle from AUI connector
- Compact size (1.75"/4.5cm H x 2.36"/6cm W x .75"/1.9cm D)
- Full-Duplex MAUs have four LEDs (Link, Receive, Transmit and Power)
- Half-Duplex MAUs have six LEDs (Collision, Link, Receive, Transmit, SQE Heartbeat and Power)

Fiber Optic Power Specifications

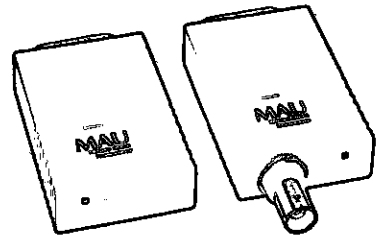
The maximum distance between any two fiber optic devices is determined by a number of factors'. This table shows the specifications for each of the available fiber types and will assist in determining which fiber optic transceiver is best for your installation.

Fiber Optic Transmitter	Approx. Segment Distance[1] (Km)	Avg. Power[2] Loss Budget (dBm)
MAU, FO	2+	20.5
MAU, FO-SingleMode	2+	7.0
FDX MAU, FO	2+	8.5
FDX MAU, FO-SingleMode	8	7.0
FDX MAU, FO-SingleMode/20	20+	17

[1] Distances listed are conservative estimates and, in some cases, could be much greater. Distance limitations are determined by a combination of fiber bandwidth, transmitter optical rise/fall time, LED/Laser spectral width, number of connectors and other physical parameters.

[2] Values have been determined under factory conditions. Actual field application values may vary.

Twisted Pair and Coaxial Transceivers



- IEEE 802.3 (ISO/IEC 8802.3) 10Base-T and 10Base-2 compliant
- *MAU/Transceiver, TP* supports use of either shielded or unshielded twisted pair
- *MAU/Transceiver, TP* includes two LEDs (Link and Power)
- *MAU/Transceiver, BNC* includes one LED (Power)
- *MAU/Transceiver, BNC* features a port termination switch
- Compact size (1.56"/3.9cm W x .63"/1.6cm H x 2.44"/6.2cm D)

TRANSCEIVERS

Ordering Information

Fiber Optic Transceivers

54-12912 **MAU, FO** — AUI to 10Base-FL (ST); Half-Duplex

54-12932 **MAU, FO-SingleMode** — AUI to single-mode (ST); Half-Duplex

55-12912 **Full-Duplex MAU, FO** — AUI to 10Base-FL (ST); Full-Duplex

55-12932 **Full-Duplex MAU, FO-SingleMode** — AUI to single-mode (ST); Full-Duplex

55-12942 **Full-Duplex MAU, FO-SingleMode/20** — as above except single-mode supports distances in excess of 20 km

Twisted Pair and Coaxial Transceivers

54-12010 **MAU/Transceiver, BNC** — AUI to 10Base-2 (BNC); Half-Duplex

54-12011 **MAU/Transceiver, TP** — AUI to 10Base-T (RJ-45); Half-Duplex

Specifications

Safety Certifications
FCC, CE, UL, TUV and CSA

Power
350 mA @ 10 - 16 VDC
(supplied via the AUI port)

Warranty
3 years to the end-user

NOTE: All fiber optic transceivers are supplied standard with ST connectors but are available with SMA connectors. Contact IMC Networks.

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