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LLA1001

1 Port 10/100/1000Base Ethernet to Fibre Interface

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LLA1001 USER MANUAL

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1. PRODUCT DESCRIPTION:

The LLA1001 Series of Ethernet transceivers allow existing 10/100/1000Mbps networks or even single computers to be easily linked over fibre. Plug and Play design ensures ease of installation and electronic and optical adjustments are never required.

Packing list

Please check the following items in the package before installing the transceiver.

10/100/1000M Ethernet optical transceiver	1
Power cord	1
User manual	1

2. FEATURES:

Easy to install (Plug and Play).

Provides reliable, long distance media / data transmission.

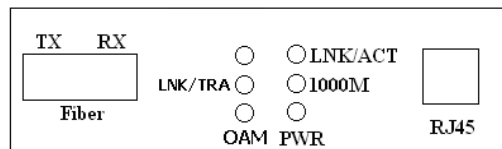
Distances of up to 0.5km on Multimode and 20km on Singlemode Fibre

Compliant with international Ethernet standards (IEEE802.3/IEEE802.3u).

3. INDICATIONS:

The unit has LEDs that indicate the following:

Front Panel:



Explanation of LED indications:

LED	Status	Explanation
Link/Act	On	Connection status display for link. "ON" indicates that link is active.
	Flash	Active status display of fiber port or RJ45 port "Flashing" indicates data packet detection
LNK/TRN	On	Fiber link fault
	Off	Fiber link OK
PWR	On	Power is on and normal.
OAM	On	Loopback testing
1000M	On	UTP port in 1000M rate
	Off	UTP port in 10M or 100M rate

4. STOCK CODE SELECTION:

LL1001ABA - 0.5km Multimode, 220Vac.

LL1001CBA - 20km Singlemode, 220Vac.

5. PREPARATION FOR USE:

5.1 UNPACKING

Check for any physical damage caused during transportation. Return any damaged equipment to the supplier. The manufacturer is not responsible for any damage caused during transportation to the end user.

5.2 INSTALLATION

Ensure that the supply voltage matches that of the equipment before installation commences. Connect the power cable. The equipment has no ON/OFF switch and is therefore active as soon as power is connected.

5.3 CONNECTION:

1. Connect the Cat5 networking cables to the RJ-45 connector.
2. Connect the multimode / singlemode fiber optic cable between the transmitter and receiver. (Note: Connect TX to RX and RX to TX).
3. Apply power to the units.

Once power is applied, the green PWR LED will light up. The green LNK/TRN and LNK/ACK status LEDs will give an indication of fibre link /data status.

6. FAULT DIAGNOSIS:

Refer to LED indications (point 3 above) for fault diagnosis.

The fibre link should be checked for consistency and the losses measured. Ensure that the correct type of fiber is being used for the particular mode of transmitter and receiver combination. Be certain that the attenuation and bandwidth of the fiber optic cable being used is within the range of the system's budget specifications. Use an optic power meter to measure the optic level coming out of the transmitter fibre port. If this level is too low or not present, then the unit may be faulty. The level of the optic signal being received at the receiver end should also be checked to be within specification. If it is too low, the unit will not operate correctly. If it is ok the receiver unit may be faulty.

7. MAINTENANCE INSTRUCTIONS:

No routine maintenance is required on this equipment.

8. CAUTION:

The transmitter unit contains a high power laser located in the optical connector. This device emits powerful invisible infrared radiation that is harmful to human eyes. The radiation from this optical connector, if viewed without any protection, will cause permanent damage to the retina of the eye. Direct viewing of this Laser must be avoided at all times.

9. SPECIFICATIONS:

1. Standard Protocol:

IEEE Std. 802.3, IEEE Std. 802.3ah, IEEE Std. 802.1P, IEEE Std. 802.1Q, IEEE Std. 802.1X

2. Data Rate: Copper: 10/100/1000 Fiber: 1000Mbps

3 Connectors: one UTPRJ-45 connector, one/two ST connector

4 Operation mode: full duplex mode or half duplex mode

5 Power supply parameter:

Power (Internal): 110-265V AC input

6 Environmental temperature : 0 - 50 degrees Celsius

7 Relative humidity : 5%-90%

8. TP cable: Cat5 UTP cable

9. Transfer fiber:

Multi-mode: 50/125, 62.5/125 or 100/140 μ m

Single mode: 8.3/125, 8.7/125, 9/125 or 10/125 μ m

10 Dimensions:

150mm (L) x 110mm (W) x 28mm (H)

10. CONTACT DETAILS

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