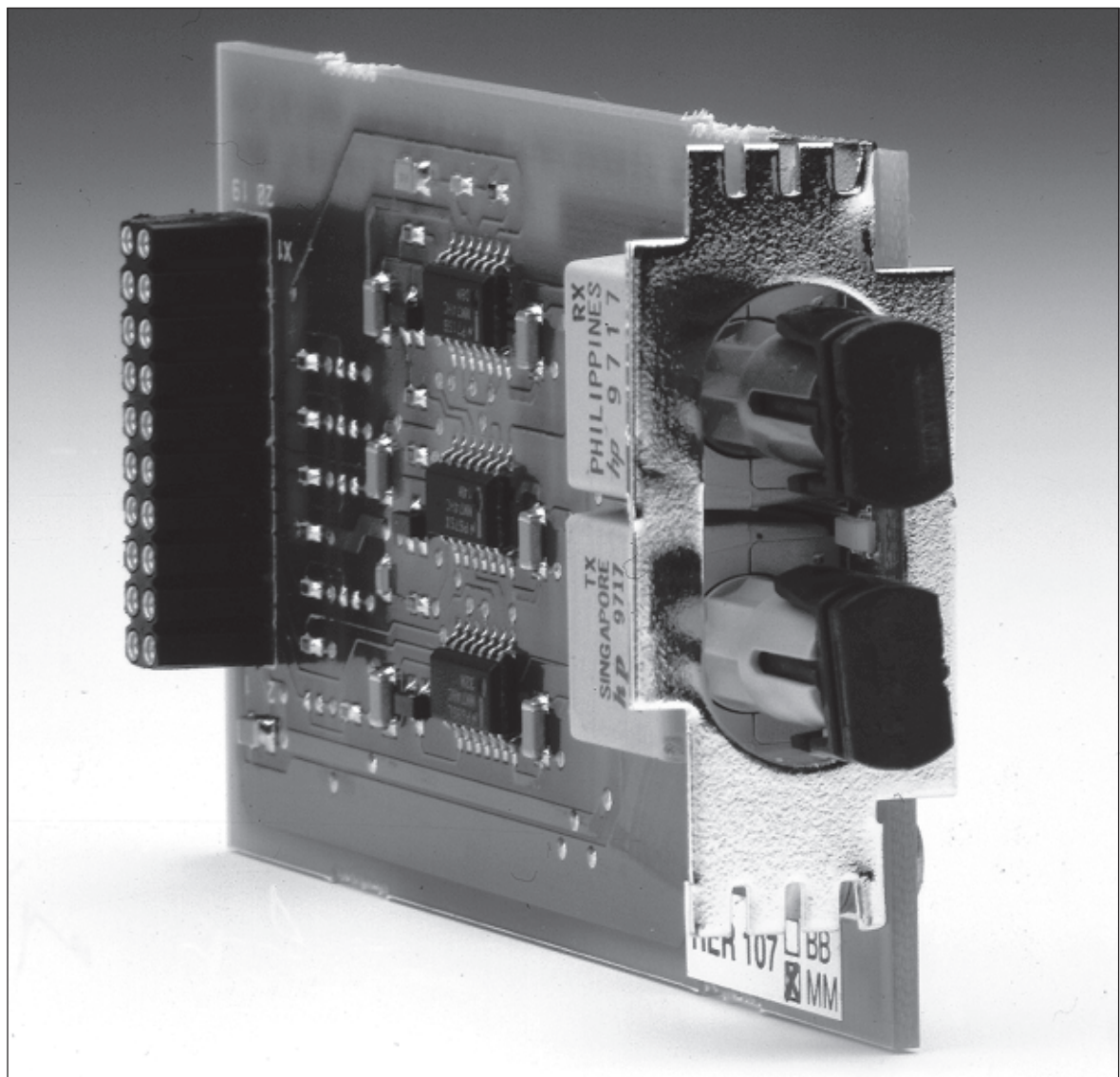


RER 107

Transceiver module

User's manual and Technical description



Data subject to change without notice

1.0 General

The RER 107 transceiver module operates as an interfacing unit between PCLTA (PC Lon Talk[®] adapter) card and fibre optic LONWORKS[®] network. It converts the data signal from PCLTA card to fibre optic signal and vice versa. The transceiver module is plugged to the SMX connector of the PCLTA card and it is designed to meet the LONMARK[™] standard. The transceiver module is powered from the PCLTA card.

The transceiver module can be connected to glass fibre optic or plastic fibre optic LONWORKS network with communication rate 1,25 Mbits/s. The Collision Detection is supported. Collision is detected when a message is received from the fibre optic cable at the time when data is transmitted from the PCLTA. The transceiver module has a led which flashes every time a message is received from the fibre optic cable.

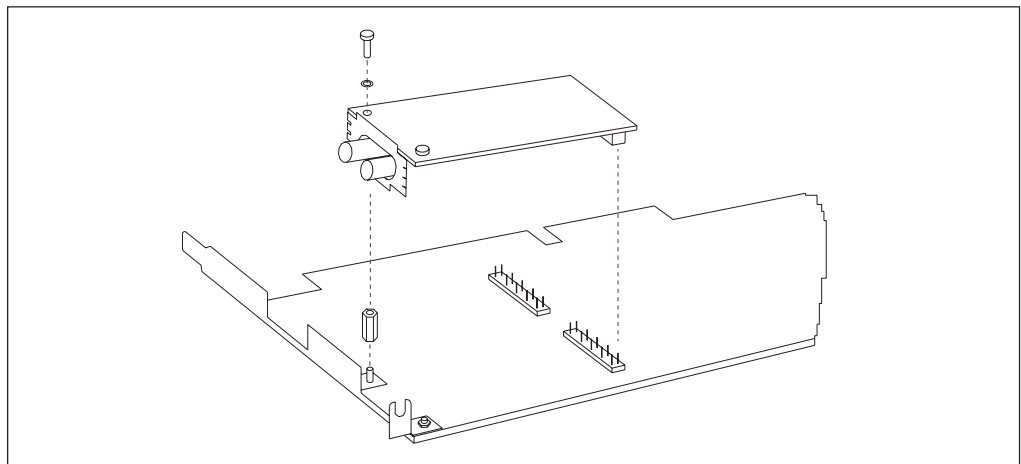
2.0 Construction

The transceiver module is a printed circuit board. The PCLTA card is plugged into PC ISA bus and thus the separate housing for the transceiver module is not needed. The back plate for use with the PCLTA card is delivered with the transceiver module.

3.0 Installation and configuration

3.1 Installation

The transceiver module is plugged to the PCLTA card's SMX connector. In the case of dual channel PCLTA card either one or two transceiver module(s) can be used. The following picture illustrates the installation of one RER 107 transceiver module to the channel A of the dual channel PCLTA card.



Information about installation of RER 107 transceiver module with MicroSCADA see MicroSCADA installation manual Rev 8.4 and later.

For more detailed installation instructions of SMX transceiver module to PCLTA card, see LONWORKS[®] SMX[™] TRANSCEIVER Installation Instructions, 078-0145-01C which is delivered with the PCLTA card.

When fibre optic cables are laid out, the special attention must be paid to instructions concerning handling, mounting and connection, etc. of optical fibres. For additional information, see manual "Plastic-core fibre optic cables. Features and instructions for mounting". The transceiver module can be provided with connectors for two plastic fibre cables with snap-in connectors, two plastic fibre cables with SMA connectors or two glass fibre cables with ST connectors

3.1 Configuration

For more information about configuration of RER 107 transceiver module see the following manuals:

- CAP 505 v1.0.2. Relay Product Engineering Tool Box
Installation and Commissioning Manual 1MRS750537-RUM
- LNT v.1.0.1. Lon Network Tool
Installation and Commissioning Manual 1MRS750830-RUM

4.0 Technical data

Environmental conditions	
- ambient temperature range	-10..+55°C
- storage temperature range	-40..+70°C
- relative humidity	max 95%, non condensing
Network connection	
- connectors	ST-type for glass fibre snap-in type or SMA - type for plastic fibre
- communication speed	1,25 Mbits/s
- maximum distances	glass fibre 1000 m plastic fibre 20 m
Board size	45.7 x 91.4 mm ²

5.0 Ordering information

RER 107 can be supplied with glass or plastic fibre optic transceivers.

Type designation for RER 107:

RER 107 MM, ST-type glass fibre optic transceivers	1MRS090702-MM
RER 107 BB, snap-in type plastic fibre optic transceivers	1MRS090702-BB
RER 107 SS, SMA-type plastic fibre optic transceivers	1MRS090702-SS
MicroSCADA Installation Manual	1MRS750718-MUM
CAP 505 v1.0.2. Relay Product Engineering Tool Box Installation and Commissioning Manual	1MRS750537-RUM
LNT v.1.0.1. Lon Network Tool Installation and Commissioning Manual	1MRS750830-RUM

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