Trainnet® Ethernet RIOM

Trainnet® MVB RIOM

Remote Input/Output Module
(ETHERNET RIOM, MVB RIOM)

EN 50155
EN 45545

FUNCTIONS

The Trainnet® RIOM enables data input and output within the vicinity of the I/O sources. It is used as an alternative to connecting I/O sources directly to the train computer (e.g. VCU) and it can lead to reduced cabling and thus cost savings.

KEY FEATURES

The RIOM supports both analogue and digital inputs/outputs. Most Trainnet® I/O modules can be used, including AIM, AOM, DIO, DRO, PTI and TSI. You can find out more about these modules by reading the dedicated datasheets or by contacting a Sales representative at EKE.

The Trainnet® RIOM includes an interface module used for the communications with the train computer. It is also equipped with an independent power supply (Trainnet® PSR module).

OPTIONS
Interfaces:
➔ The Trainnet® Ethernet RIOM is equipped with one Ethernet interface for connectivity with the train computer (CPE module).
➔ The Trainnet® MVB RIOM

uses MVB interfaces to connect with the train computer. By default, the MVB physical interface is Electrical Medium Distance (EMD) with two sub D-9 connectors. Electrical Short Distance with optical isolation (ESD+) mediums are available upon request.

Number of modules:
➔ In its most compact version, RIOM can use up to 8 EKE Trainnet® I/O modules and be fitted into a 44TE rack.
➔ An 84TE rack version is also available as an option to fit up to 18 I/O modules.

TECHNICAL SPECIFICATIONS

Dimensions (W x H x D)
 3U 44TE Rack
 280 mm x 133 mm x 215 mm
 (installation width 240 mm)
 3U 84TE Rack
 483mm x 133mm x 215 mm
 (installation width 443 mm)
Weight
 44TE option
 2.6 Kg (+ I/O module weights)
 84TE option
 4 Kg (+ I/O module weights)
Input Power
24...36 V DC -30/+25%
or 48...110 V DC -30/+25%
Temperature Range (operational)
-40 ºC...+70 ºC
MTBF (40 ºC ambient temperature)
Depends on installed I/O modules
Interface options
 Ethernet RIOM:
 1 x 10/100 Mbit/s M12
 MVB RIOM:
 Electrical Medium Distance (EMD)
 with two sub D-9 connectors
 (Isolated Electrical Short Distance (ESD) physical interface)