Technical Specifications:CTD-1GBIT AG AU

1 Mechanical characteristics

Number of mating cycles: n ≥ 10’000

2 Electrical values

Description	Symbol	Value	Comments
Transmission resistance	R_{contact}	10 mΩ	The transmission resistance relates to a single contact.
Current-carrying capacity	I_{contact}	0.4 A	The current-carrying capacity relates to a single contact with cable cross section area of 0.14mm²/AWG26.
Insulation resistance	$R_{\text{insulation}}$	≥ 1 GΩ	The insulation resistance was measured from contact to contact and from contact to shield.
Rated voltage	U_{R}	50 V	Maximum permitted nominal voltage of the connected transmission system.

3 Transmission quality

3.1 Measurement setup:

The measurement equipment in Table 1 was used to determine the transmission quality. For the measurement, a 2-meter cable with two RJ45 connectors was prepared, then the CTD-1GBIT AG AU was connected in between (see Figure 1).

Measuring instrument	Measurement adapter	Cable type	Plug type
Manufacturer: *Softing* Type: *WireXpert WX500*	Permanent Link	Manufacturer: *Dätwyler* Type: *CU 7702 4P FLEX AWG26 S/FTP CAT 7*	Manufacturer: *Metz Connect* *130910-I RJ45-Einbaumodul E-Dat CAT 6a*

Table 1: Measuring equipment

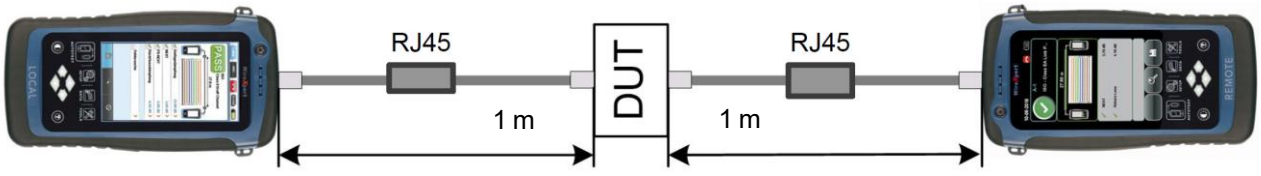


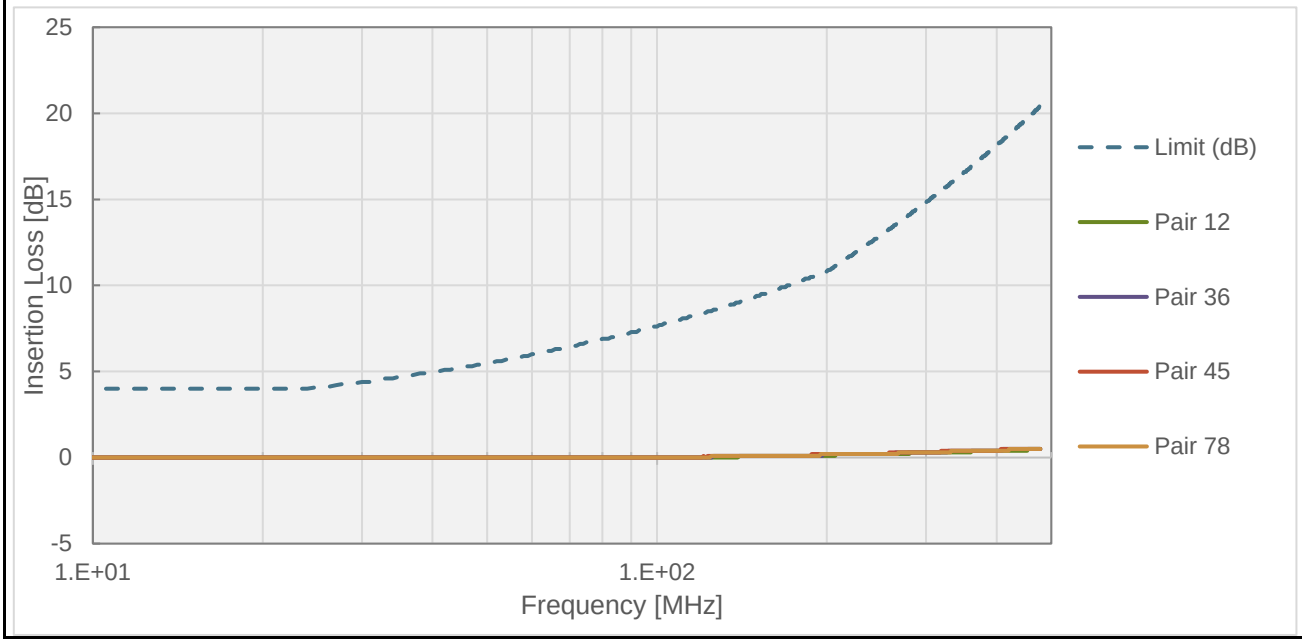
Figure 1: Measurement setup for the device under test (DUT) in this case the CTD-1GBIT AG AU

3.2 Attenuation characteristics:

All limits given below refer to category 5e according to the IEC 11801-1 standard for the "Connection Link (CL)" configuration.

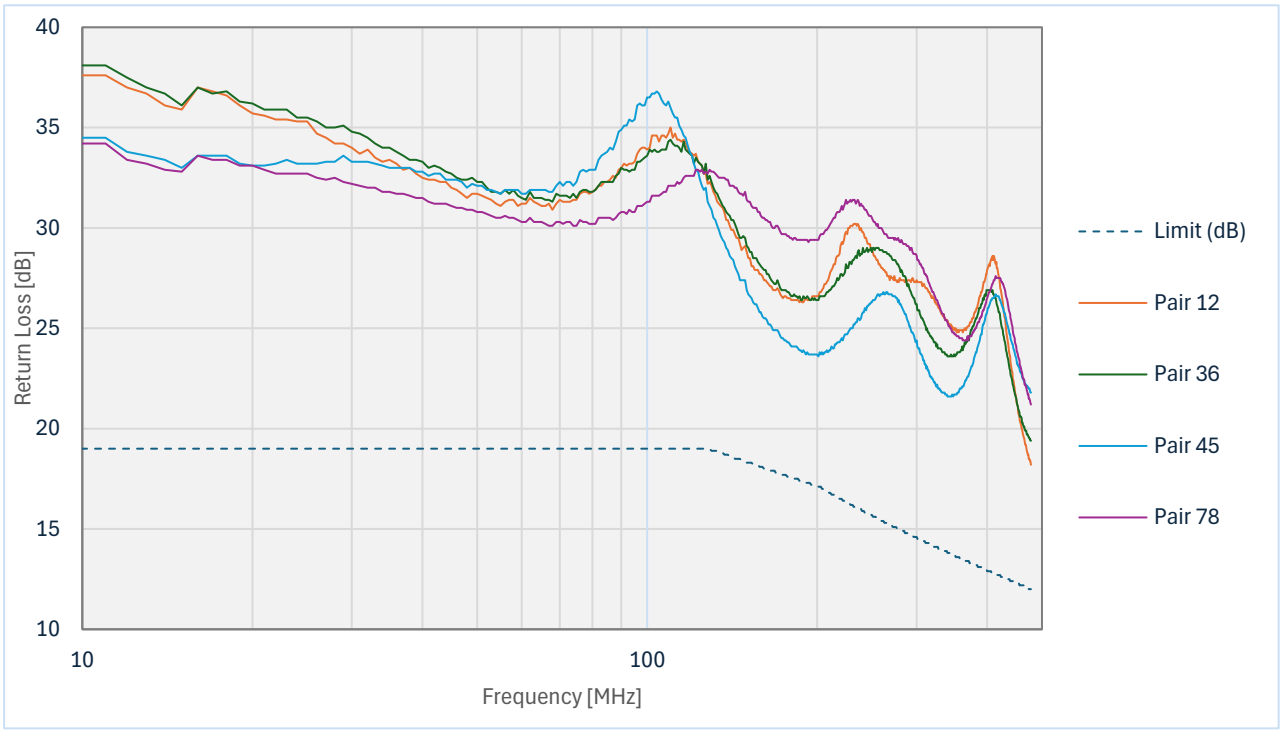
3.2.1 Insertion loss:

In new state



3.2.2 Return loss:

In new state



3.2.3 NEXT:

In new state