



# CAS ISN EXTENSION EXTENSION KIT FOR TRANSMISSION AND CROSSTALK MEASUREMENTS



The extension kit for the CAS ISN is made to perform transmission and crosstalk measurements on impedance stabilization network (ISN) for unshielded balanced pairs. In combination with the CAS ISN and its extensions for T2 and cable category 6 all necessary adapter have been included to measure common mode (CM) impedance, phase angle, voltage division factor, decoupling attenuation (isolation), longitudinal conversion loss (LCL), transmission and crosstalk measurements.



Measurement balun MB 300

- Extension for CAS ISN
- Measurements for transmission and crosstalk
- Suitable for cat.6 (250 MHz)

### Technical specifications MB 300 (measurement balun)

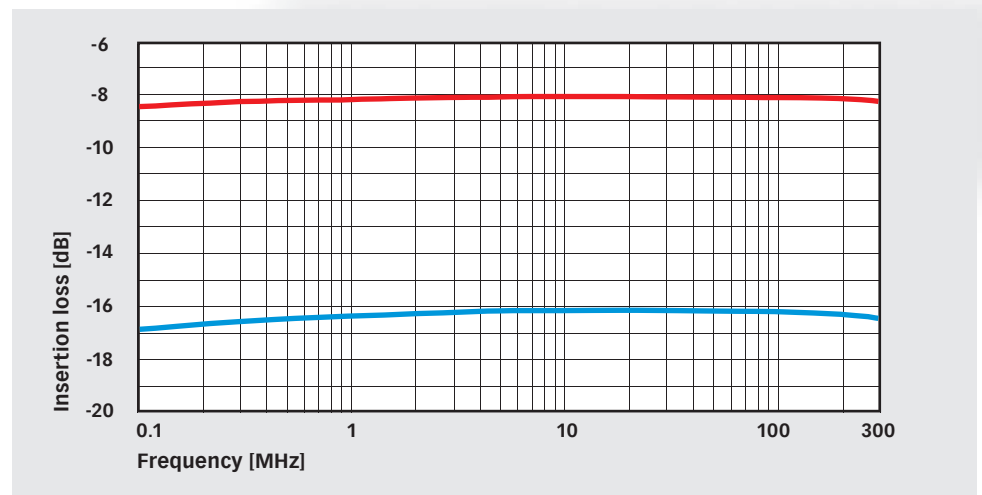
Frequency range:	(100 kHz) 1 MHz to 300 MHz
Impedance ratio (unbalanced : balanced):	50 : 100
Insertion loss, typical:	16.2 dB at 30 MHz (back to back; 8.1 dB for single unit)
Flatness, typical:	< 1 dB at 100 kHz to 300 MHz
VSWR, typical	
50 Ω port:	< 1:1.25 at 1 MHz to 300 MHz (100 kHz < 1:1.5)
100 Ω port:	< 1:1.25 at 100 kHz to 300 MHz
LCL, typical, 100 Ω port:	90 dB at 100 kHz 80 dB at 10 MHz 55 dB at 100 MHz
CMR, typical:	65 dB to 25 dB at 1 MHz to 300 MHz
Amplitude balance, typical:	< 0.1 dB at 100 kHz to 100 MHz < 0.2 dB at 100 MHz to 300 MHz
Phase balance, typical:	< 2° at 100 kHz to 100 MHz < 5° at 100 MHz to 300 MHz
Max. power:	20 dBm
Connector	
50 Ω port:	BNC female
100 Ω port:	1 mm female (2x 100 Ω port, 1x ground)
Dimension (LxWxH):	72 mm x 32 mm x 27 mm
Weight:	approx. 85 g



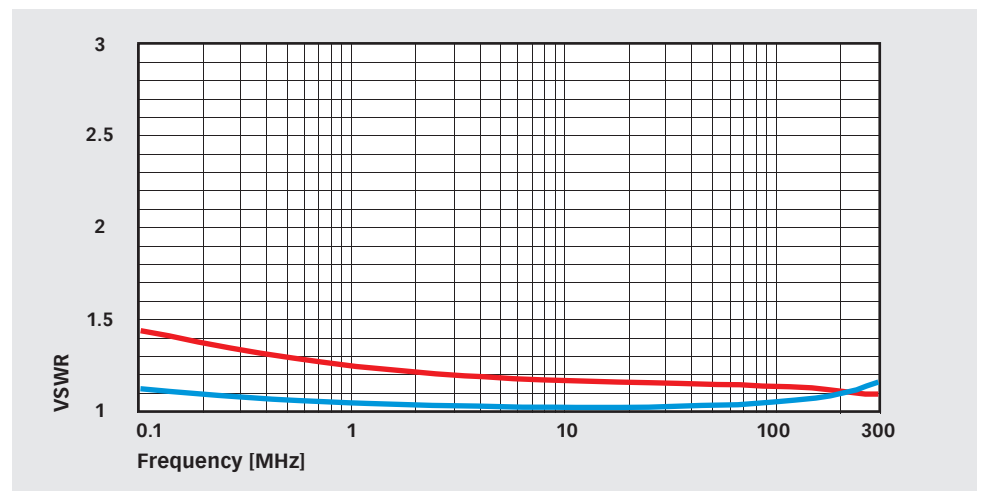
CAS ISN-EXT-TRA

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Insertion loss (typical values) of MB 300, — single balun, — back to back

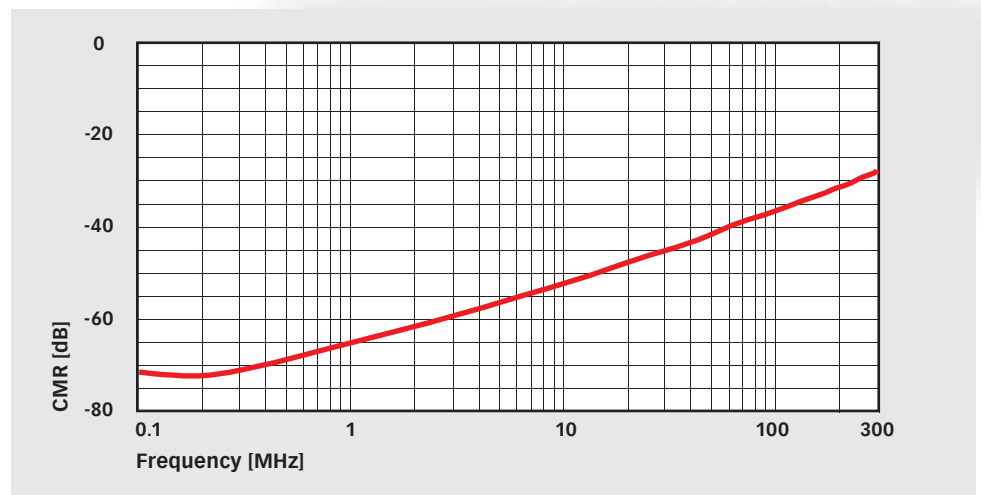


VSWR (typical values) of MB 300, — 50 Ω port, — 100 Ω port

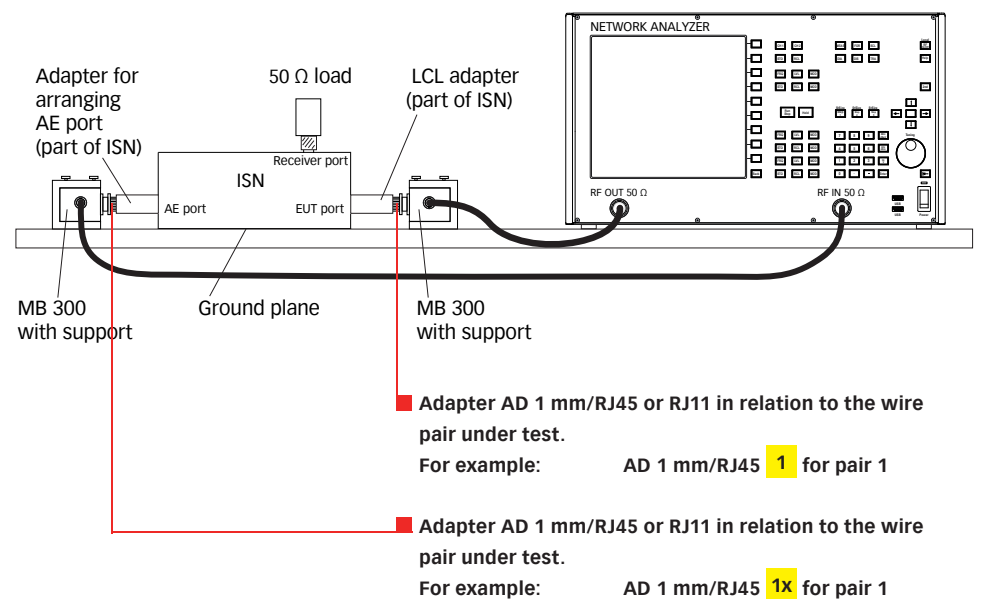


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Common Mode Rejection (CMR), typical values of MB 300, — 100  $\Omega$  port

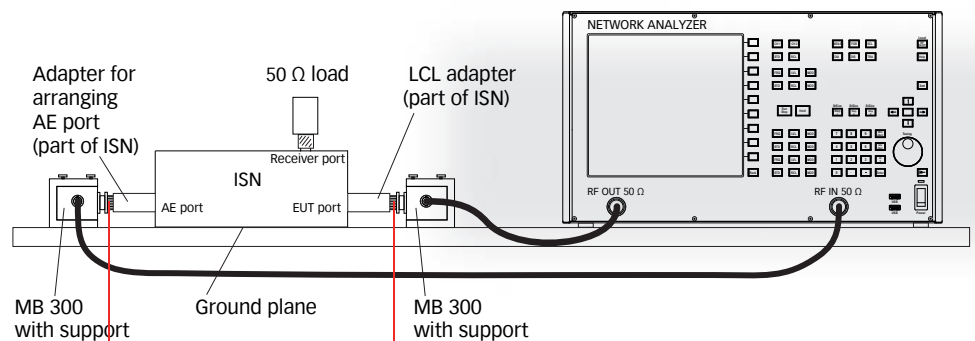


Example for measuring the transmission of the ISN



# CAS ISN EXTENSION EXTENSION KIT FOR TRANSMISSION AND CROSSTALK MEASUREMENTS

Example for measuring the crosstalk of the ISN



■ Adapter AD 1 mm/RJ45 or RJ11 in relation to the wire pair under test.

For example: AD 1 mm/RJ45 **1** for pair 1

■ Adapter AD 1 mm/RJ45 or RJ11 in relation to the wire pair under test.

For example: AD 1 mm/RJ45 **2** for pair 2

## Delivery information

Part number	Description
248580	CAS ISN Calibration kit for ISN T8 and ISN T4
248632	CAS ISN extension for T2A* Adapter parts for calibration of ISN T2A, required CAS ISN
248631	CAS ISN extension for cat.6* Adapter parts for calibration of ISN T8-Cat6, required CAS ISN
*) The BMB 1000 LCL measuring bridge is required for adjusting the options back in the factory.	
254675	CAS ISN-EXT-TRA Adapter parts for transmission and crosstalk measurements on ISNs, required CAS ISN and extensions for T2 and cat.6