

CAS CDNE CALIBRATION KIT FOR CDNE



- Measurements for CM impedance and phase angle, VDF, decoupling attenuation and DM impedance
- Includes measuring balun and adapters

The Calibration Kit CAS CDNE is made for function tests and verification measurements on coupling decoupling network for emissions measurements (CDNE). Measuring parameters are common-mode (CM) impedance, (CM) phase angle, voltage division factor, decoupling attenuation and differential-mode (DM) impedance. CDNEs and measurements on CDNEs are defined in CISPR 16-1-2.

The CAS CDNE contains adapters for establishing the 150 Ω to 50 Ω connection, the common-mode, the length correction, the impedance measuring and the differential-mode measurements, including a measuring balun with a balanced output of 100 Ω .

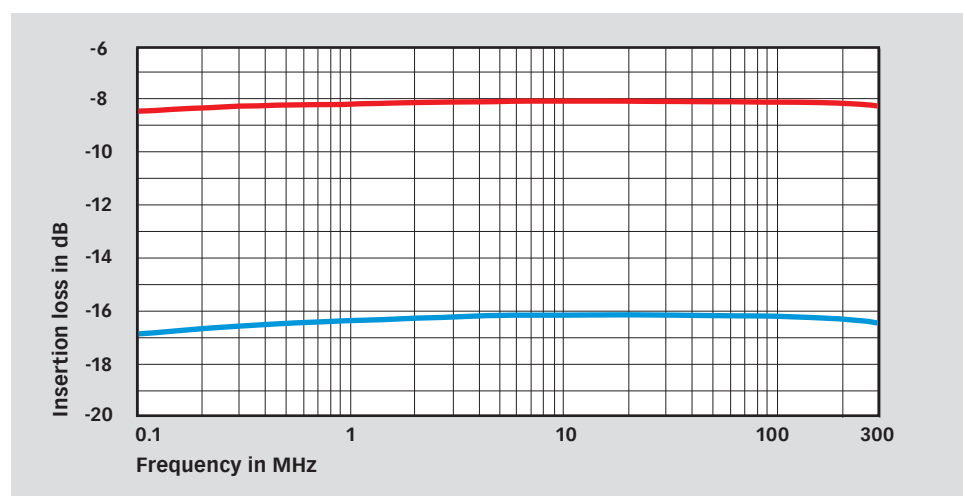
Quantity	Product	Description
1	IMA U100	Impedance measuring adapter
1	CAL U100B	50 Ω / 150 Ω -adapter
1	SAR M210E-open	CM adapter for CDNE M210, part for setting the delay time
2	SAR M210E	CM adapter for CDNE M210
1	SAR M310E-open	CM adapter for CDNE M310, part for setting the delay time
2	SAR M310E	CM adapter for CDNE M310
1	TRA U0-150	Termination load 0 Ω and 150 Ω
1	MB 300	Measuring balun
1	Support	Provides the set-up position of MB 300
1	Open 1mm	Adapter "open" for 1 mm
1	Short 1mm	Adapter "short" for 1 mm
1	Match 1mm	Adapter "match" for 1 mm
1	AD 1mm/4mm	1 mm / 4 mm Adapter
1	A 50-BNC	50 Ω (for termination the RF port of the CDNE)
1	Storage box	Storage box

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Technical specifications MB 300 (measuring balun)

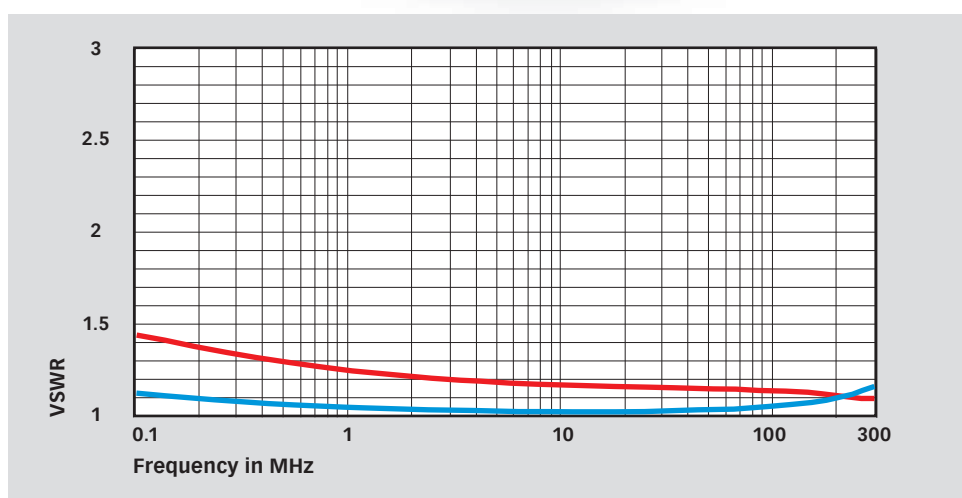
Frequency range:	(100 kHz) 1 MHz to 300 MHz
Impedance ratio (unbalanced/balanced):	50 / 100
Insertion loss, typical:	16.2 dB at 30 MHz (back to back; 8.1 dB for single unit)
Flatness, typical:	< 1 dB at 100 kHz to 300 MHz
VSWR, typical	
50 Ω port:	< 1:1.25 at 1 MHz to 300 MHz (100 kHz < 1:1.5)
100 Ω 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

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

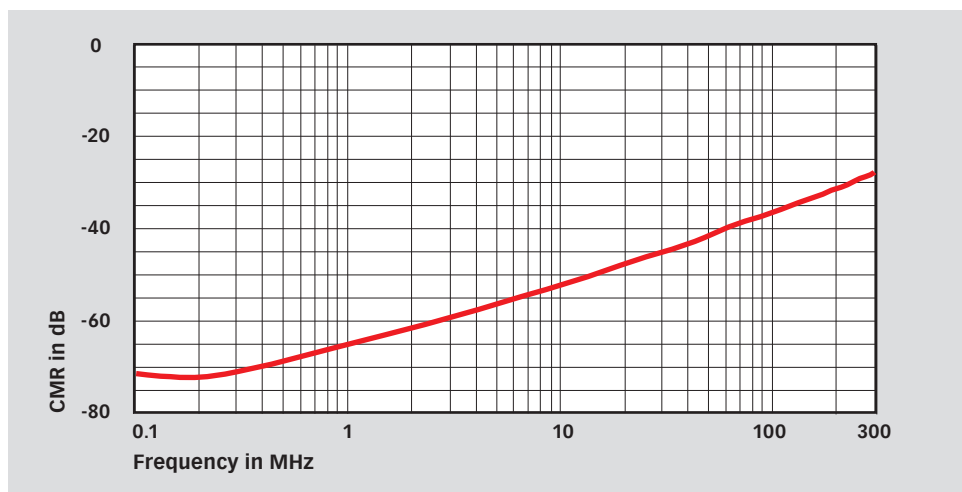


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VSWR (typical values) of MB 300, — 50 Ω port, — 100 Ω port

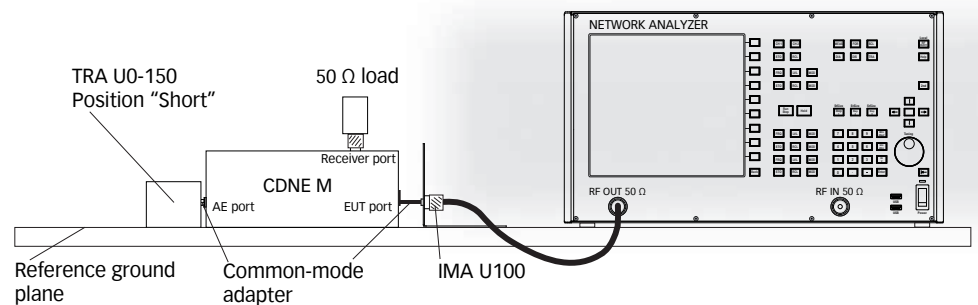


Common Mode Rejection (CMR), typical values of MB 300, — 100 Ω port

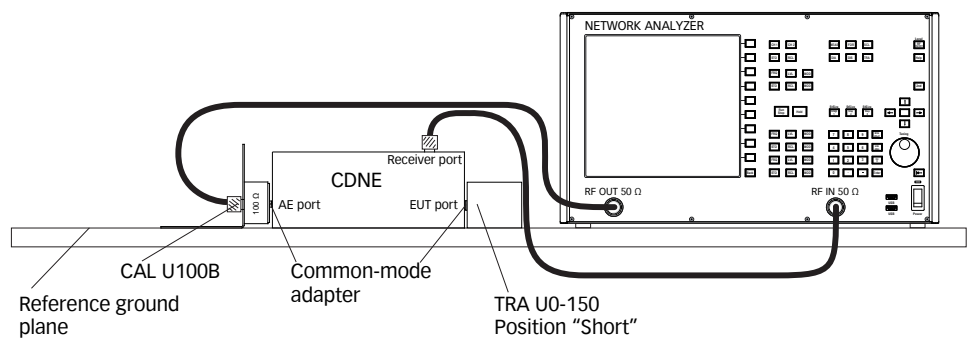


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Example for CM impedance and phase angle set-up, AE port shorted

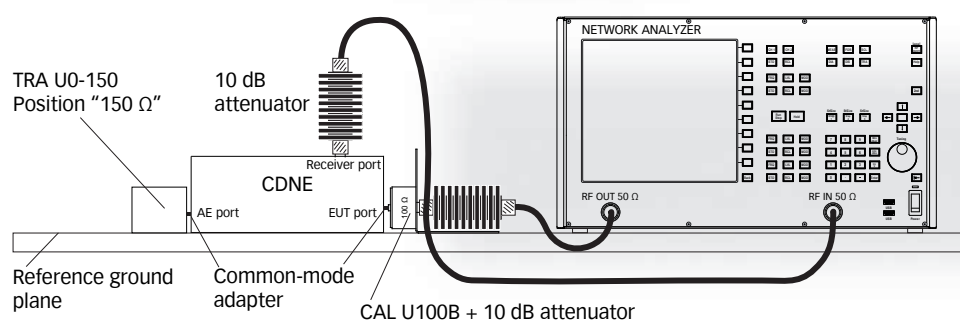


Example for decoupling attenuation set-up, AE port shorted

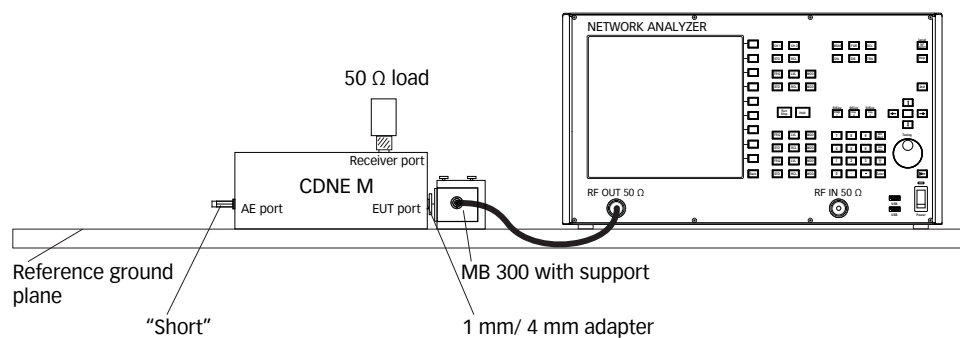


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Example for measuring the voltage division factor



Example for DM impedance set-up, AE port shorted



Mechanical specifications of CAS CDNE

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Size of storage case (W x H x D): 390 mm x 110 mm x 290 mm
Weight: approx. 2.3 kg

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Specifications subject to change without notice.
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are designed and manufactured under the strict
quality and environmental requirements of the ISO
9001. This document has been carefully checked.
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errors or inaccuracies.

Model no. and options

Part number	Description
242322	CAS CDNE Calibration kit for CDNE, traceable calibration and certificate included

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