



## CAS CDNE CALIBRATION KIT FOR CDNE



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.

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

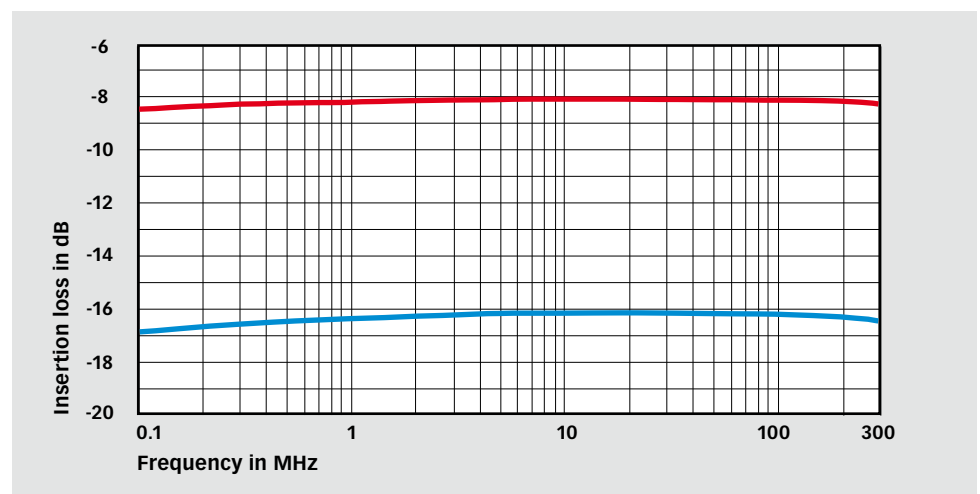
Quantity	Product	Description
1	IMA U100	Impedance measuring adapter
1	CAL U100B	50 Ω / 150 Ω-adapter
1	SAR M210E-open	CM adapter for CDNE M210, part for setting the delay time
2	SAR M210E	CM adapter for CDNE M210
1	SAR M310E-open	CM adapter for CDNE M310, part for setting the delay time
2	SAR M310E	CM 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 (CDNE)	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)

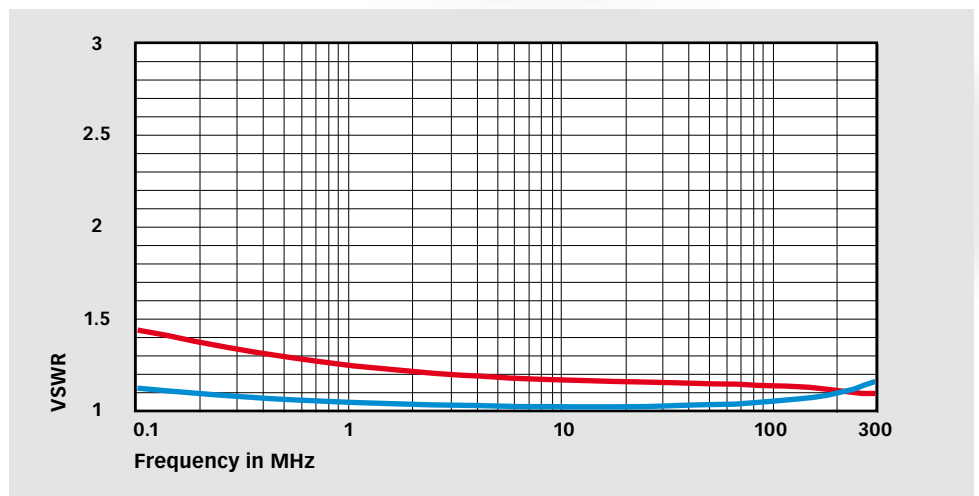
Frequency range:	(100 kHz) 1 MHz to 300 MHz
Impedance ratio (unbalanced/balanced):	50 / 100
Insertion loss, typical:	16.2 dB at 30 MHz (back to back; 8.1 dB for single unit)
Flatness, typical:	< 1 dB at 100 kHz to 300 MHz
VSWR, typical	
50 $\Omega$ port:	< 1:1.25 at 1 MHz to 300 MHz (100 kHz < 1:1.5)
100 $\Omega$ port:	< 1:1.25 at 100 kHz to 300 MHz
LCL, typical, 100 $\Omega$ 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 $\Omega$ port:	BNC female
100 $\Omega$ port:	1 mm female (2x 100 $\Omega$ 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

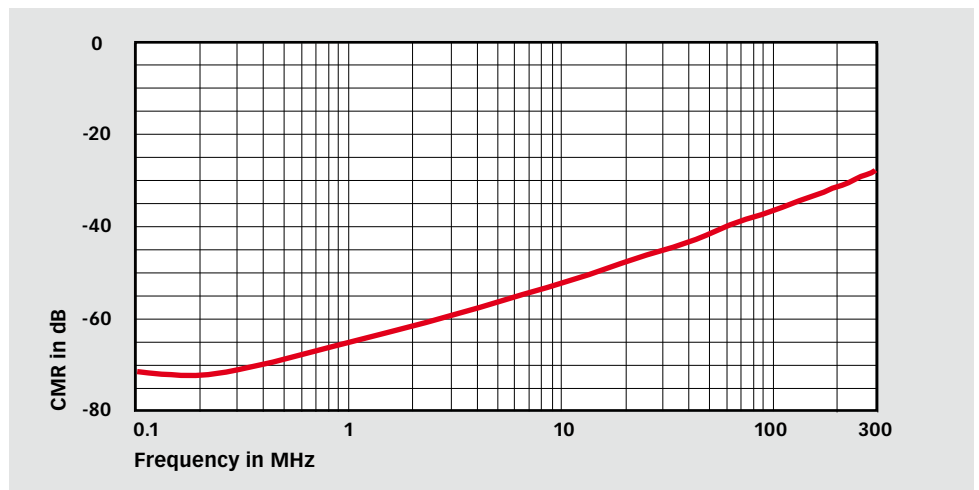


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VSWR (typical values) of MB 300, — 50  $\Omega$  port, — 100  $\Omega$  port

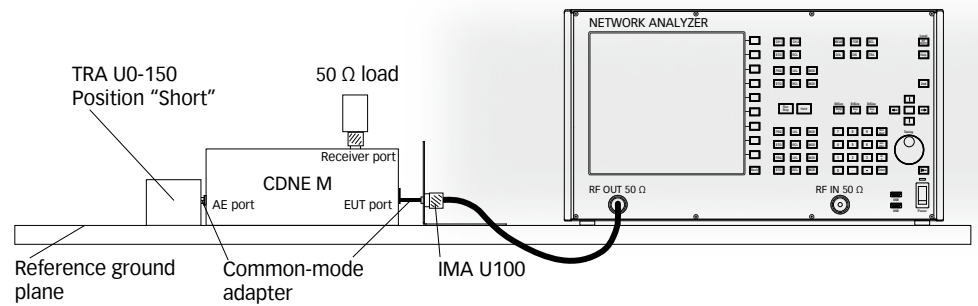


Common Mode Rejection (CMR), typical values of MB 300, — 100  $\Omega$  port

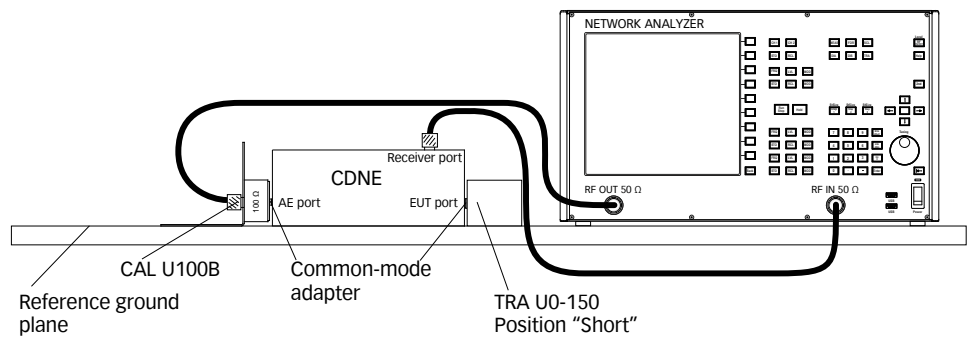


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Example for CM impedance and phase angle set-up, AE port shorted

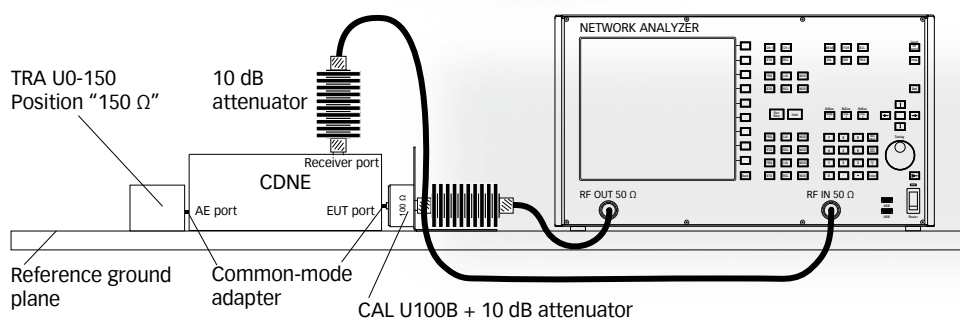


Example for decoupling attenuation set-up, AE port shorted

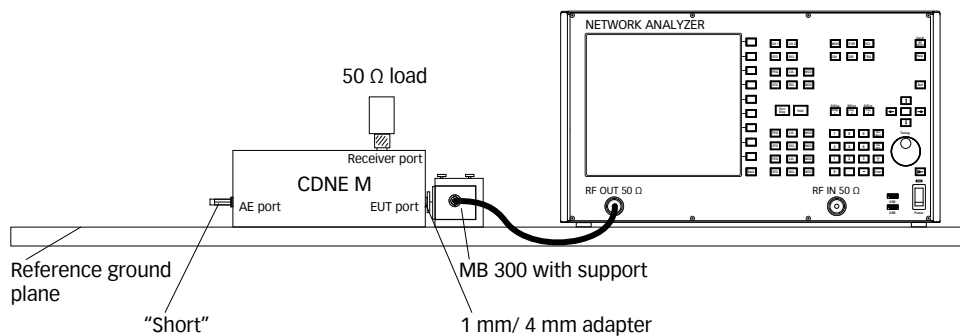


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## Example for measuring the voltage division factor



## 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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## Model no. and options

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

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