



FRANKONIA

EMC Test-Systems GmbH

CIT-1000

DATASHEET

Also available as
CIT-100



CONDUCTED IMMUNITY TESTSYSTEM BCI-TESTING

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DESCRIPTION

The CIT-1000 is a further development of the for years available and proven „CIT-10“, with the extended frequency range up to 1200MHz, stand-alone-operation via integrated Touch-Screen-PC as well as integrated directional coupler and power-meter for forward and reverse power measurement.

As usual with our CIT-series, all integrated instruments, like Signalgenerator, RF-Power-Amplifier and the 3-channel-RF Power Meter can be used as „stand-alone-unit“, too.

Hence, the Signal-generator and the RF-power-meter can also be used for radiated immunity tests acc. IEC/EN 61000-4-3.

Furthermore an additional external RF-Power-amplifier could be connected to the CIT-1000 for this purpose.

SPECIAL FEATURES

- ✓ Conducted RF immunity tests acc. to IEC/EN 61000-4-6, BCI-tests acc. to ISO 11452-4 and MIL-STD 461
- ✓ Signalgenerator, RF-Power-Amplifier, 3-channel power-meter and directional coupler combined in one 19"-case.
- ✓ Stand-alone operation via integrated touch-screen-PC
- ✓ Frequency-range 4 kHz-1200 MHz
- ✓ With integrated amplifier 25W / 75W / 180W
- ✓ Control-Software included
- ✓ Temperature-mesuring-input for control and display of the BClclamp temperature
- ✓ Interfaces: USB, LAN, GPIB



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TECHN. SPECIFICATIONS				
RF-Power Amplifier (TYPE)	25 W	75 W Namur	75 W	180 W
Frequency range	100kHz-250MHz	10kHz-250MHz	100kHz-400MHz	1MHz-400MHz
Output Power Nominal	25 W	75W	75 W	180 W
Linear @ 1dB compression	20 W	50 W	50 W	100 W
Gain	46dB nominal	51dB nominal	51dB nominal	51dB nominal
Flatness	±1.5 dB maximum			
Input power for rated output	1 mW / 0 dBm			
Input / output impedance	50 Ω			
Input VSWR	1.5:1 max			
Harmonic distortion	<-20 dBc @ 20W	<-20 dBc @ 50W	<-20dBc @ 50W	<-20 dBc @ 100W
Noise figure	typ. 5 dB	typ. 7 dB	typ. 7 dB	tbd
Spurious output	<-75 dBc @ 10 W			



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TECHNICAL SPECIFICATIONS

RF-Generator

Two switchable outputs
(Only one can be used simultaneously) 2 x SMA

Frequency range 9 kHz to 1.2 GHz (usable from 4 kHz)

Frequency resolution 1 Hz

Output level range 0 to -63 dBm

Output level resolution 0.1 dB

Harmonics < 30 dBc

Spurious < 45 dBc

Amplitude mod. (internal) 0 - 100%, resolution 1%

Amplitude mod. (external) 0-100%, max.
Amplitude 1V=100%, BNC jack

Pulse modulation (internal) 5-95%, resolution 1%

Pulse modulation (external) DC...1MHz, 3,3/5V CMOS/TTL, BNC jack

LF-Generator (modulation)

Connector BNC jack

Frequency range 1 Hz to 100 kHz

Frequency resolution 0.1 Hz

Signal Sine wave / square wave / triangular

Amplitude 0...1 V

RF-Voltmeter 1 (test-level)

Connector BNC jack

Frequency range 9 kHz to 1.2 GHz (usable from 4 kHz)

Measuring range -40 to +30 dBm

TECHNICAL SPECIFICATIONS

RF-voltmeter 2+3 (fwd. and rev. power)

Connector 2 x SMA

Frequency range 9 kHz to 1.2 GHz (usable from 4 kHz)

Measuring range -40 to + 33 dBm + direct. coupler typ. 40 dB

EUT-Monitor input

input voltage 0 to 10 V DC

resolution 2.5 mV

Input impedance 100 k Ω

EUT-failed input

Input signal 0 to 10 V DC

Detection mode 2.5 mV

Temperature measurement 10 to 100 °C (1039 to 1385 Ω)
resolution < 1 °C (PT 1000)

SCPI interfaces

USB 2.0 USB-B

LAN, 100 Mbit RJ45

GPIB (optional) Centronics

Digital I/Os

Out 4 Bit Digital out, 5 V CMOS/TTL

In 4 Bit Digital in, 5 V CMOS/TTL

Interlock

Closes at R < 1 Ω



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