

WSDU-1X232

232 Channel HTOL RF Testing System, 125 mW, 350 MHz...2500 MHz

Features

- wideband
- compact 19" 34 U design
- amplitude balance ± 1 dB typ.

Applications

- qualification of e.g. active and passive cellular and wireless front-end components
- quality assurance (new designs, batch verification)
- research and development (R&D)

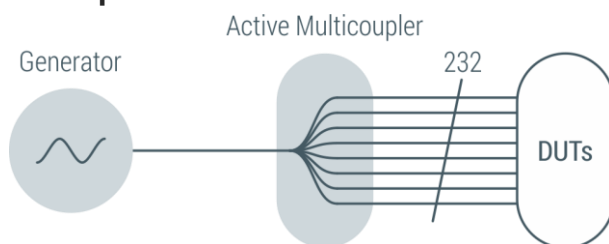


At a glance

High-temperature Operating Life Time (HTOL) testing is an intense stress test performed to simulate aging and accelerate thermally activated failure mechanisms.

During HTOL testing a large set of devices under test (DUT) is put under extreme temperature and absolute maximum rating conditions. Typically it is performed at 125°C. Details are described in JEDEC standard JESD22-A108.

Principle Circuit



Introduction

Power stress tests and HTOL tests requires RF systems which offer multichannel high output power with high level precision. WSDU-1X232 is a compact, automatic HTOL RF testing system, suitable for the frequency range 350 MHz...2500 MHz in 50 ohms technology. It offers 232 RF channels with up to 400 mW output power per channel, translating to 125 mW at the input of the DUT. All channels can be supplied via a single low power RF input.

Easy maintenance

The WSDU-1X232 features a very modular design for easy maintenance. Every module can be replaced by unfastening the screws on the front panel and removing the RF cables on the rear side of the module. Voltage supply and data bus connections do not require any manual wiring when modules are swapped.

RF Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
impedance	Z_{IN}/Z_{OUT}		50		Ohms	
number of outputs	n_{DUT}		232			SMA connectors male
low frequency	f_{min}		300	350	MHz	
high frequency	f_{max}	2500	2600		MHz	
output power balance	ΔP_{out}		± 1	± 2	dB	output to output
harmonics	d2		- 35	- 25	dBc	2 nd order
output isolation	S_{23}		- 60		dB	adjacent channels
max. output power	P_{OUT}	+ 20	+ 21		dBm	

Common Specifications

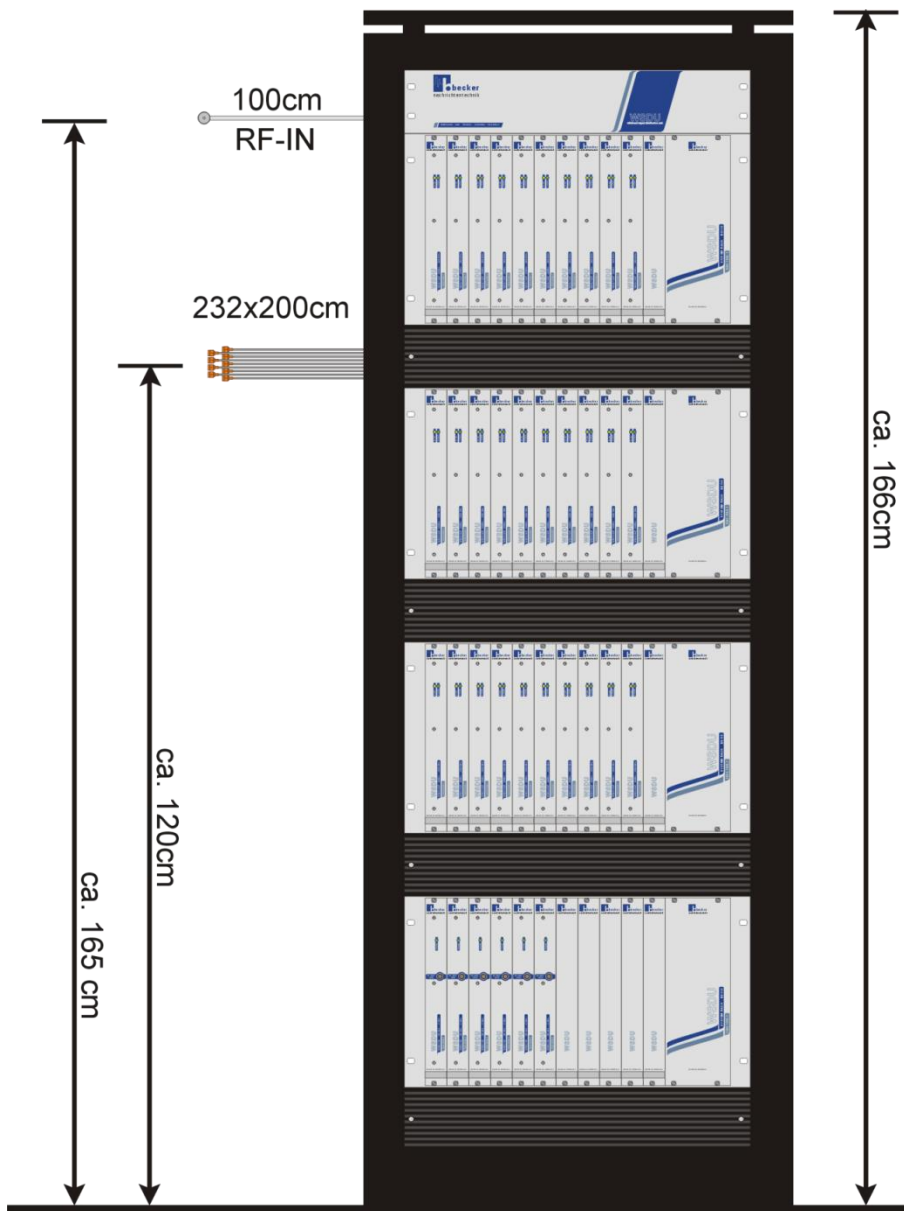
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
supply voltage	U_{AC}		230		V	AC 50 Hz
power consumption	P		800		W	
power plug		type „F“ CEE7/4				
dimensions	W x H x D	approx. 600 x 1660 x 600			mm	19", 34 U
cable feedthrough	h_{OUT}		120		cm	from floor, RF output 1...232
output cable length	l_{OUT}	2			m	RF cable length from rack to DUT
cable feedthrough	h_{GEN}		120		cm	from floor, to RF generator
cable length RF input	l_{GEN}		0.5		m	RF cable length for RF generator
weight	m		120		kg	
warm up time	T_w		1		h	
operating temp. range	T_o	+ 20		+ 30	°C	
storage temperature	T_s	- 40		+ 70	°C	
EMC		EN61326-1:2013				according directions: 2014/30/EU
safety		EN61010-1:2010				according directions: 2014/35/EU

Ordering Information

WSDU-1X232	P/N:	1004.1002.1	Cable feed-trough on the right side
WSDU-1X232	P/N:	1004.1002.2	Cable feed-trough on the left side



Positions of Cable Feedthrough and Lengths



Related Products

Product	Description	P/N
TSQA-1X80PM	80 Channel Precise Automatic HTOL RF Testing System, 2.5 W, 20 MHz...3000 MHz	1606.1012
TSQA-1X16PM	16 Channel Precise Automatic HTOL RF Testing System, 2.5 W, 20 MHz...3000 MHz	1606.1027
TSQA-16CH10	16 Channel High-Precision Automatic HTOL RF Testing System, 10 W, 600 MHz ... 2200 MHz	1507.1012
WSDU-1X80P	80 Channel HTOL RF Testing System, 2.5 W, 20 MHz...3000 MHz	1202.6102
WSDU-1X16P	80 Channel HTOL RF Testing System, 2.5 W, 20 MHz...3000 MHz	1602.6402