

WSDU-1X80P

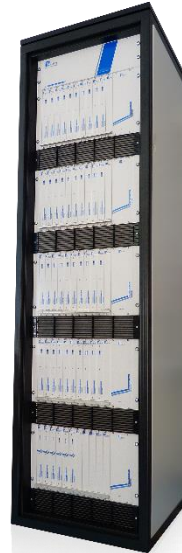
80 Channel HTOL RF Testing System, 2.5 W, 20 MHz...3000 MHz

Features

- wideband
- compact 19", 43 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)

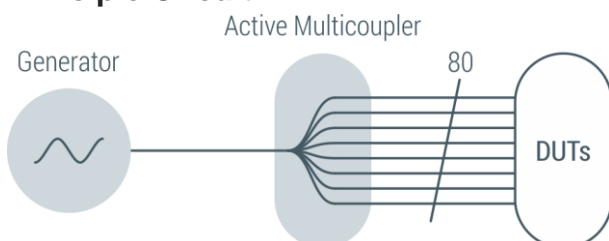


At a glance

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 require RF systems with many output channels each delivering high output power with high level precision. WSDU-1X80P is a compact HTOL RF testing system, suitable for the frequency range 20 MHz...3000 MHz in 50 ohms technology. It offers 80 RF channels with up to 5 watts output power per channel, translating to 2.5 W at the input of the DUT. All channels can be supplied via a single low power RF input.

Easy maintenance

The TSQA-1X80P 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}		80			SMA connectors male
low frequency	f_{min}			20	MHz	
high frequency	f_{max}	2800	3000		MHz	
output power balance	ΔP_{out}		± 1	± 2	dB	output to output
harmonics	d		- 30		dBc	
output isolation	S_{23}		- 80		dB	adjacent channels
max. output power	P_{OUT}	+ 33	+ 34		dBm	$f \leq 2200$ MHz
	P_{OUT}	+ 30	+ 31		dBm	$f > 2200$ MHz
output isolation	S_{23}		- 80		dB	adjacent channels

Common Specifications

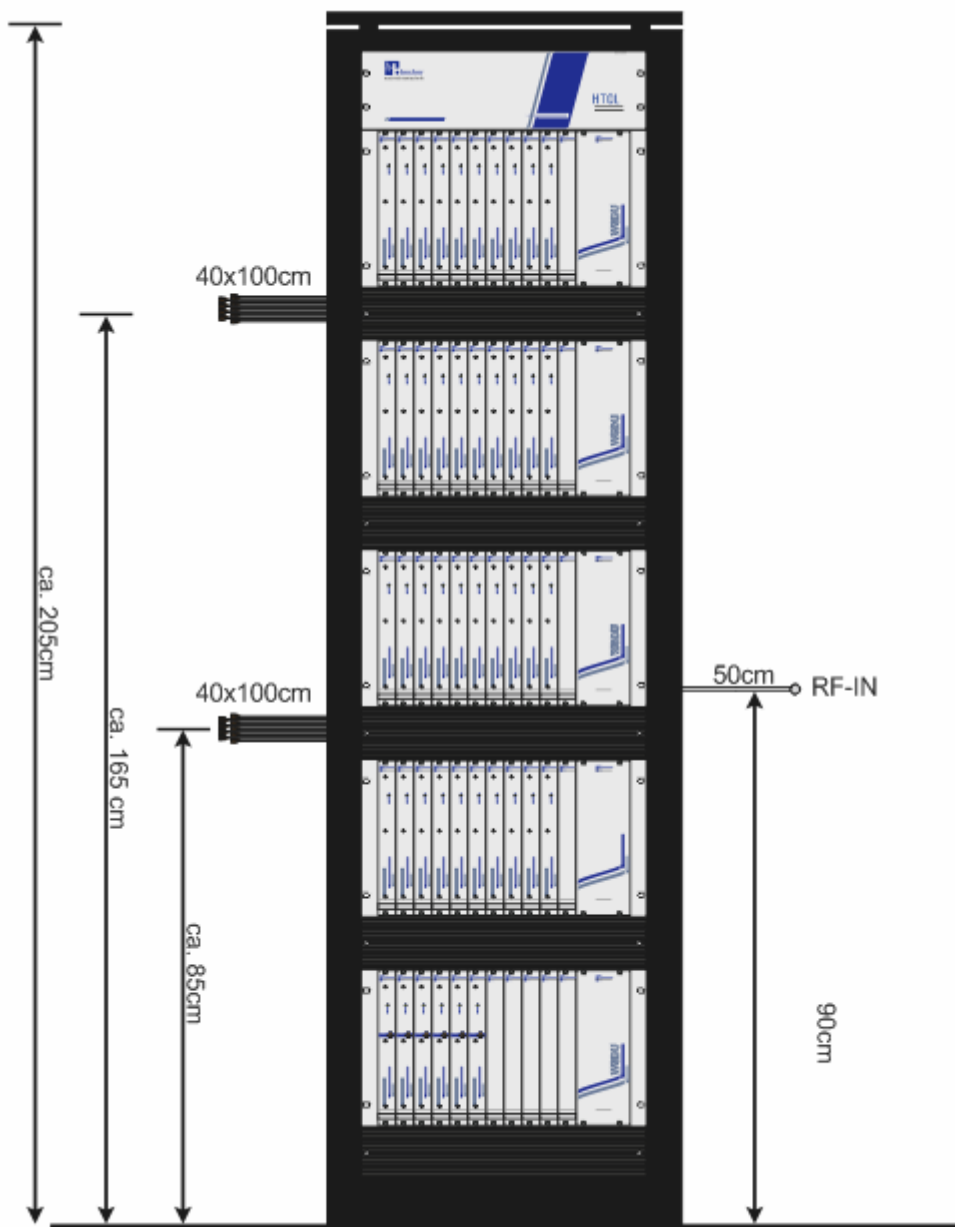
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
supply voltage	U_{AC}		230		V	AC 50 Hz
power consumption	P		1300		W	@ $P_{out} = 80 \times 1.6$ W, 2 GHz
power cable length	l	1.5			m	
power plug		type „F“ CEE7/4				
dimensions	W x H x D	approx. 600 x 2005 x 600			mm	19", 43 U
cable feedthrough	h_{OUT1}		85		cm	from floor, RF output 1...40
cable feedthrough	h_{OUT2}		165		cm	from floor, RF output 41...80
output cable length	l_{OUT}		1		m	RF cable length from rack to DUT
cable feedthrough	h_{GEN}		90		cm	from floor, to RF generator
cable length RF input	l_{GEN}		0.5		m	RF cable length to RF generator
weight	m		200		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-1X80P	P/N:	1202.6102.1	Cable feed-trough on the right side
WSDU-1X80P	P/N:	1202.6102.2	Cable feed-trough on the left side



Positions of cable feedthrough and lengths (variant with feedthrough on left side)



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	1606.1002
TSQA-16CH10	16 Channel High-Precision Automatic HTOL RF Testing System, 10 W, 600 MHz ... 2200 MHz	1507.1012
WSDU-1X16P	16 Channel HTOL RF Testing System, 2.5 W, 20 MHz...3000 MHz	1202.6402
WSDU-1X232	232 Channel HTOL RF Testing System, 125 mW, 350...2500 MHz	1004.1002