

J2300A Series

Multi-DUT Test Set

J2300A-208T – 2 to 8-port

J2300A-212T – 2 to 12-port

J2300A-416T – 4 to 16-port

J2300A-424T – 4 to 24-port

Datasheet



Key features

- Expand VNA ports to increase test throughput
- Flexible configuration to expand VNA ports to 4x, 6x ports
- Wide frequency range, DC to 18/20 GHz
- Easy access to RF input/output connections from front panel permits easy maintenance and reconfiguration
- Standard calibration method and performance check to allow operator to perform accurate test
- Capable of millions cycles operating life, reduce cost of test
- With automation program to control all hardware and offer pass/fail result
- Smart queuing algorithm to save operation dead time
- Remote controlled by PC program through RS232 interfaces

Product Overview

J2300A series allows switching of multiple signals without physically changing the connections. It provides the life and reliability required for automated test and measurement, signal monitoring, and routing applications.

With a standard 19-inch enclosure, J2300A can be mounted in 19-inch cabinet and/or underneath of a VNA (vector network analyzer) such as Keysight E5071C or E5063A.

Flexible Configuration to Expand VNA Ports

- Expand VNA ports to increase test throughput.
- Flexible configuration to expand VNA ports to 4x, 6x ports.
- Easy access to RF input/output connections from front panel permits easy maintenance and reconfiguration.
- Standard calibration method and performance check to allow operator to perform accurate test.

High-performance Switches for RF Applications

- High isolation, low insertion loss and high repeatability (please refer to specifications below for details).
- Guaranteed 5 million cycles operating life (typical 10 million cycles).

Flexible and Economic Configuration

- Economical price minimizes budgetary constraints
- Flexible configuration to meet various application demands (please refer to options of order information for details).

Queuing Function to Increase Test Throughput

- Support up to 16 operators can trigger measurement simultaneously.
- Smart queuing algorithm to save operation dead time.
- With automation program to control entire test system and offer pass/fail test result.
- LED indicators display the queuing status

Environmental Monitoring to Ensure Quality Measurement

- Continue to monitor chassis temperature to prevent from it is outside allowed range.
- Adjust fan speed automatically to ensure the coaxial switches are working under proper temperature.
- Chassis fan is controlled by PWM, in addition to suppress acoustic noise but also reduce power consumption.

Smart Counters to Monitor Switching Times

- With switching counters, they can be used to count switching times of all coaxial switches.
- Counters can be set to trigger alarm or even stop operating as soon as the counter value exceeds maximum allowed value.

Remote control Through RS232

- Support RS232 interface for remote control applications.
- With J2300A maintenance utility, user can view switching counts or setup miscellaneous trigger events (please refer to user's guide for details).

Royalty-free API Library

- API can be used to develop customized ATS measurement system or laboratory test applications.
- Library includes programming reference, example source codes for VB and VC++.

RF Characteristic Specifications

	J2300A-212T		J2300A-424T	
Frequency range	DC to 20 GHz			
Operating life	5 million cycles min.			
Insertion loss	0.3dB + 0.015 x freq.(GHz)		0.3dB + 0.015 x freq. (GHz)	
Isolation	DC to 12 GHz	90 dB min.	DC to 4 GHz	90 dB min.
	12 to 15 GHz	70 dB min.	4 to 12.4 GHz	85 dB min.
	15 to 20 GHz	65 dB min.	12.4 to 20 GHz	76 dB min.
SWR	DC to 4 GHz	1.2 max.	DC to 4 GHz	1.15 max.
	4 to 12.4 GHz	1.35 max.	4 to 12.4 GHz	1.25 max.
	12.4 to 18 GHz	1.45 max.	12.4 to 20 GHz	1.30 max.
	18 to 26.5 GHz	1.70 max.		
Maximum power rating	1 watt (CW) average into 50 Ω internal loads			
Connectors	SMA (f)			

	J2300A-208T		J2300A-416T	
Frequency range	DC to 18 GHz			
Operating life	5 million cycles min.			
Insertion loss	DC-1 GHz	0.20 dB max.	DC-1 GHz	0.15 dB max.
	1 - 8 GHz	0.30 dB max.	1 - 8 GHz	0.30 dB max.
	8 - 12 GHz	0.40 dB max.	8 - 12 GHz	0.40 dB max.
	12 - 18 GHz	0.80 dB max.	12 - 18 GHz	0.50 dB max.
Isolation	DC to 1 GHz	85 dB min.	DC to 1 GHz	85 dB min.
	1 to 8 GHz	80 dB min.	1 to 8 GHz	75 dB min.
	8 to 12 GHz	75 dB min.	8 to 12 GHz	70 dB min.
	12 to 18 GHz	60 dB min.	12 to 18 GHz	60 dB min.
SWR	DC to 1 GHz	1.10 max.	DC to 1 GHz	1.10 max.
	1 to 8 GHz	1.40 max.	1 to 8 GHz	1.30 max.
	8 to 12 GHz	1.40 max.	8 to 12 GHz	1.35 max.
	12 to 18 GHz	1.60 max.	12 to 18 GHz	1.40 max.
Maximum power rating	1 watt (CW) average into 50 Ω internal loads			
Connectors	SMA (f)			

Environmental Specifications

Temperature

Operating	0°C to 55 °C
Storage	- 40 °C to 70 °C

Humidity

Operating / Storage	15 to 95% Relative Humidity (RH)
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General Specification

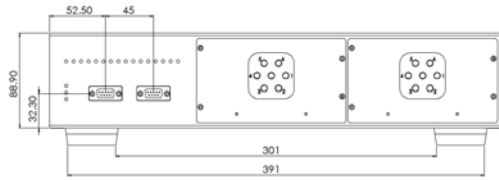
AC Power

AC power in	Full range, 100 ~ 230V
Power consumption	95 watts (typ.)

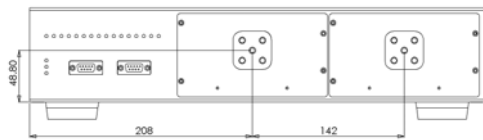
Host Interface Port

RS232	DB9 Male, DTE (115200 baud rate)
USB	USB 2.0 Compliant (Used By Technical Support)

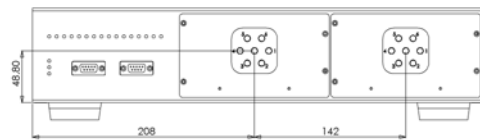
Mechanical Dimensions (unit=mm)



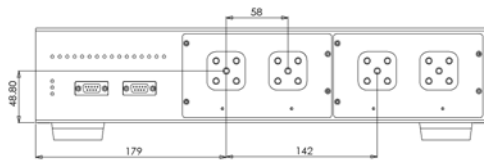
Option 208T



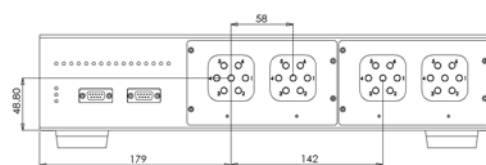
Option 212T



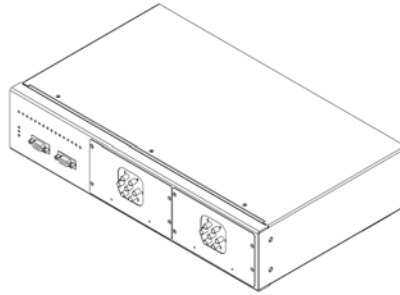
Option 416T



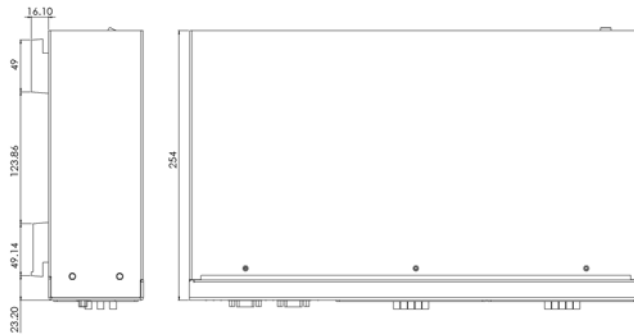
Option 424T



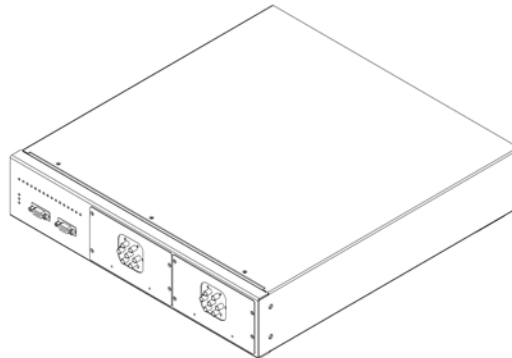
Option BA06



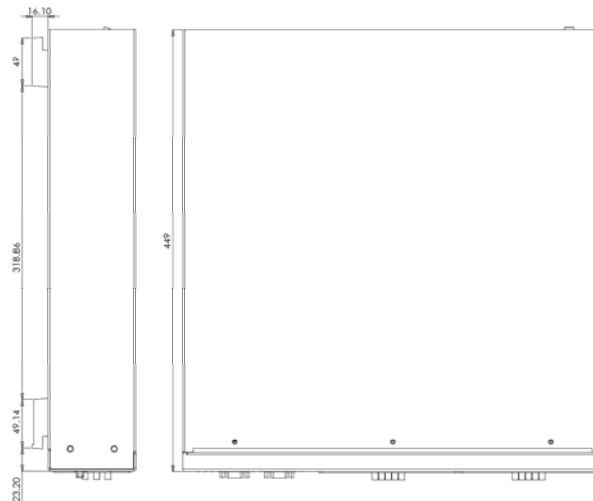
W: 425mm
D: 254mm
H: 105mm



Option BA07



W: 425mm
D: 449mm
H: 105mm



Ordering Information

J2300A	Multi-DUT Test Set
Option 208T	2 to 8-port terminated
Option 212T	2 to 12-port terminated
Option 416T	4 to 16-port terminated
Option 424T	4 to 24-port terminated
Option BA06	Short chassis (for E506x series ENA)
Option BA07	Long chassis (for E507x series ENA)
Option CE100	SMA cable M-M L=100cm
Option CE150	SMA cable M-M L=150cm
Option CE200	SMA cable M-M L=200cm
Option CL100	Low loss SMA cable M-M L=100cm
Option CL150	Low loss SMA cable M-M L=150cm
Option CL200	Low loss SMA cable M-M L=200cm
Option D201	J2201 Agent Box (Qty. might up to 16)
Option A201	Rack mount kit

Product specifications and descriptions in this document subject to change without notice.



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