

GENUS Benchtop Chassis

With 10MHz internal reference

Modular benchtop instrumentation chassis. Accommodates all GENUS series 1U modules, up to 10 module slots. AC powered. Internal 10MHz card, which is not hot swappable.

Compact & flexible

Compact chassis holding up to 10 RF modules, which can be mixed

Local control & monitoring

via front panel capacitive HMI touchscreen. (Optional)



Secure communications
with SNMPv3, HTTPS

Range of RF functions

Frequency Converters, TLTs, Noise Generators, Redundancy Switches (N+1), RF Over Fibre, Splitter & Combiners, Matrices and Power Supply modules are available.

Remote control & monitoring

via RJ45 Ethernet via RJ45, 10BaseT/100BaseTx, ETL TCP/IP protocol, SNMP & Web Browser Interfac

General Specifications		
AC Input		85-264V _{ac} 50/60Hz (Fused (L+N)) Use T 3.15 A, 250V Ceramic 5x20mm x2 Lightning protection suitable for local installation conditions should be provided)
Redundancy & Hot Swap		
PSU Redundancy		N/A
CPU Redundancy		N/A
Control & Monitoring		
Local Control & Monitoring		HMI, capacitive touchscreen
Remote Control & Monitoring		Ethernet via RJ45, 10BaseT/100BaseTx ETL TCP/IP protocol SNMP v3 Built-in Web Server (HTTPS)
Internal 100MHz Distribution		Optional
Reliability		
MTTR		15 minutes (Assumes spares at hand. Applies to LRUs only and assumed in-house stock.)
MTBF	Chassis	> 250 000
	CPU	> 250 000
Physical & Environmental		
Weight		<18kg
Capacity		10 module slots
Temperature		Operating: -20 to 50°C / Storage: -40°C to 80°C
Location/Humidity		Indoor use only — 20 to 90% non-condensing
Altitude		10,000ft/3,000m AMSL (Above Mean Sea Level)

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

Internal 10MHz - High Stability Ovenised Oscillator

Internal 10MHz reference and distribution module for GENUS chassis. The integrated 10MHz card has full control and monitoring via the parent chassis HMI, or remotely via parent chassis Ethernet. The reference source is switchable between this on-board ovenised 10MHz oscillator or the customer supplied external reference, connected to slot 17 EXT input module (if fitted).

Frequency Setting		10±0.000001 MHz
Output Type		Sinewave
Output Power Range		-10dBm to +10dBm (±2dBm)
Harmonic Rejection (at 0 dBm power out)	2nd	>40 dBc
	3rd	>50 dBc
	4th	>60 dBc
	5th	
SSB Phase Noise dBc/Hz (typ.)		0 dBm 10MHz src
	10 Hz	<-120
	100 Hz	<-140
	1000 Hz	<-145
	10,000 Hz	<-155
	100,000 Hz	
Frequency Stability	Over Operating Temp.	< ±5 x 10 ⁻⁹
	Short-term (per second)	< 5 x 10 ⁻¹²
	Load Change (+5%)	< ±5 x 10 ⁻¹⁰
	Power Supply Variations (+5%)	< ±2 x 10 ⁻⁸
Frequency Aging	Per Day	±5 x 10 ⁻¹⁰
	Per Year	±5 x 10 ⁻⁸
Alarms		10MHz source RF power level. Card operational status. (User settable Auto switchover for reference source (Int/Ext) on RF power alarm trigger.)
Hot Swap		Field replaceable by user

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