

QAFS-1250-20000-MP

1.25~20GHz

Features:
 * High Frequency Stability
 * Ultra Low Phase Noise

Applications:
 * Wireless
 * Transceiver
 * Laboratory Test
 * Radar

Electrical

Output Frequency:	1.25~20GHz
Step:	10kHz
Switching Speed:	500nS max.
Output Power:	13dBm min.
Frequency Stability:	same as reference
Frequency Accuracy:	same as reference
Output Spurious:	-55dBc max.
External Reference:	10 or 100MHz
Reference Power:	5±3dBm
Reference Phase Noise:	-155dBc/Hz max. @1kHz
Voltage:	+12±0.5V DC +15V DC max.
Current:	1.7A (first) 1.4A (stable)
Control Type:	Parallel port
Impedance:	50Ω

Offset	Freq.	Output Phase Noise(dBc/Hz)			
		1.25GHz	5GHz	10GHz	20GHz
100Hz		-105	-91	-85	-78
1KHz		-128	-116	-110	-104
10KHz		-135	-124	-118	-112
100KHz		-135	-124	-118	-112
1MHz		-138	-126	-120	-114

Mechanical

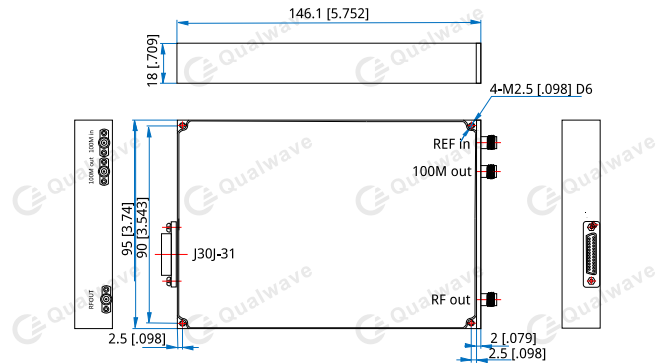
Size*1:	146.1*95*18mm 5.752*3.74*0.709in
RF Connectors:	SMA Female
Power & Control Interface:	J30J-31
Mounting:	4-M2.5 Depth 6mm

[1] Exclude connectors.

Environmental

Operating Temperature:	-40~+70°C
Non-operating Temperature:	-55~+85°C

Outline Drawings



Unit: mm [in]
 Tolerance: ±0.2mm [±0.008in]

Pin Numbering

Pin	Function
1	+12V
2	LD (Locked: high voltage)
3	+12V
4	NC
5	GND
6~26	N1~N21(parallel port control code)
27	N22 PLUSE (Pulse modulation input)
30	LE Latch
28, 29, 30	N23, N24, N26(NC)

How To Order

QAFS-1250-20000-MP - 100MHz
QAFS-1250-20000-MP-1 - 10MHz

Customization is available upon request.

Typical Performance Curves:
10GHz Phase Noise (dBc)

R&S FSUP 50 Signal Source Analyzer				LOCKED			
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +0 dB			
Signal Frequency:	9.999997 GHz	IntPHN (100.0 .. 10.0 M)	-56.6 dBc				
Signal Level:	14.68 dBm	Residual PM	0.120 ?				
Cross Corr Mode	Harmonic 1	Residual FM	12.012 kHz				
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.0334 ps				

