



ELECTRICAL SPECIFICATIONS:

RF OUTPUT

FREQUENCY RANGE: 50 MHz - 20 GHz
 FREQ. STEP @ Fout<3 GHz: 0.04 Hz (STANDARD MODE)
 3 Hz (FAST MODE)
 SWITCHING TIME: 80 μs (STANDARD MODE)
 30 μs (FAST MODE)
 OUTPUT POWER: +15 dBm
 OUTPUT RETURN LOSSES: 14 dB
 HARMONIC LEVEL: -30 dBc Typ.
 SUBHARMONIC LEVEL: -30 dBc
 SPURIOUS LEVEL: -60 dBc

PHASE NOISE (Typ)

	@1 GHz	@3 GHz	@10 GHz	@20 GHz	Unit
1KHz	-102	-92	-81	-75	dBc/Hz
10KHz	-110	-101	-90	-85	dBc/Hz
100KHz	-112	-106	-94	-86	dBc/Hz
1MHz	-142	-137	-128	-120	dBc/Hz
5MHz	-148	-146	-140	-131	dBc/Hz

DIGITAL OUTPUT

FREQUENCY RANGE: 300 kHz - 700 MHz
 AUX1/2 OUTPUT: DIFFERENTIAL: LVPECL, LVDS, HCSL
 2x SINGLE-ENDED: LVCMOS

INTERNAL REFERENCE

OCXO

ELECTRICAL

SUPPLY VOLTAGE: +7VDC ± 10%
 POWER CONSUMPTION: 15 W

AUX3 OUTPUT:

COHERENT 6-12 GHz RF SIGNAL

CONNECTORS

RF OUT: SMA (F)
 REF IN1: BNC (F)
 REF IN2: BNC (F)
 AUX1, AUX2: SMA (F)
 AUX3: SMA (F)
 POWER/RS232/SPI: DE-15 (M)
 CTRL: Reserved
 USB: Type Mini B receptacle (USB 2.0)
 ETHERNET: 10BaseT LAN interface

INTERNAL FREQUENCY STABILITY

TEMPERATURE STABILITY: ±1 ppm
 AGING: ±3 ppm (20 years)

EXTERNAL REFERENCE

INPUT FREQUENCY: 10/100 MHz
 INPUT POWER: +5 dBm ± 10 dB

ENVIRONMENTAL RATING:

TEMPERATURE RANGE: -20° TO +70°C
 IP CODE: IP67



NOTE: The above specifications are subject to change or revision. Specifications are at 25°C unless stated otherwise.

	QP microWAVE CÓLQUIDE 6 28231 LAS ROZAS MADRID, SPAIN	APPROVALS	DATE	SIGNED	DESCRIPTION: SYNTHESIZER 50 MHz - 20 GHz	REV.:	SHEET:
		DRAW	05/10/18	CRU	CODE:	000	1 DE 1
		CHECKED	05/10/18	BME	QP-FSPLL-0020-04		
		APPROVED	05/10/18	JAV			