



ELECTRICAL SPECIFICATIONS:

RF OUTPUT

FREQUENCY RANGE:	50 MHz - 20 GHz
FREQ. STEP @ Fout<3 GHz:	0.02 Hz (MODE: FINE STEP) 3 Hz (MODES: STD & SPUR FREE)
SWITCHING TIME:	< 100 μs 30 μs (MODE: FAST & STD)
OUTPUT POWER:	+15 dBm Typ.
OUTPUT RETURN LOSSES:	14 dB
HARMONIC LEVEL:	-30 dBc Typ.
SUBHARMONIC LEVEL:	-30 dBc Typ.
SPURIOUS LEVEL:	-60 dBc Typ.(MODE: SPUR FREE)

PHASE NOISE (Typ)

	@1 GHz	@3 GHz	@10 GHz	@20 GHz	Unit
1KHz	-100	-90	-80	-75	dBc/Hz
10KHz	-110	-101	-90	-88	dBc/Hz
100KHz	-112	-103	-94	-87	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

AUX3 OUTPUT:	SINGLE-ENDED: LVCMOS
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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

INTERNAL REFERENCE

TCXO

ELECTRICAL

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

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

ENVIROMENTAL 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	13/11/18	CRU	CODE:	003	1 DE 1
		CHECKED	13/11/18	BME	QP-FSPLL-0020-01		
		APPROVED	13/11/18	JAV			