



ELECTRICAL SPECIFICATIONS:

RF OUTPUT

FREQUENCY RANGE:	50 MHz - 40 GHz
FREQ. STEP @ Fout < 3 GHz:	0.02 Hz (MODE: FINE STEP) 3 Hz (MODES: STD & SPUR FREE)
SWITCHING TIME:	< 100 μ s 30 μ s (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)

DIGITAL OUTPUT

FREQUENCY RANGE:	300 kHz - 700 MHz
AUX1/2 OUTPUT	DIFFERENTIAL: LVCMOS, LVPECL, LVDS, HCSL
AUX 3 OUTPUT	COHERENT 6-12 GHz RF SIGNAL

INTERNAL FREQUENCY STABILITY

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

EXTERNAL REFERENCE

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

PHASE NOISE (Typ.)

	@1 GHz	@3 GHz	@10 GHz	@20 GHz	@40 GHz	Unit
1KHz	-100	-90	-80	-75	-68	dBc/Hz
10KHz	-110	-101	-92	-88	-82	dBc/Hz
100KHz	-112	-103	-92	-87	-81	dBc/Hz
1MHz	-142	-137	-128	-120	-113	dBc/Hz
5MHz	-148	-146	-140	-131	-123	dBc/Hz

INTERNAL REFERENCE

TCXO

ELECTRICAL

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

CONNECTORS

RF OUT:	2.92mm (F)
REF IN1:	BNC (F)
REF IN2:	BNC (F)
AUX1, AUX2:	SMA (F)
AUX3:	SMA (F)
POWER/RS232/SPI:	D-E 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
DRAW	14/08/20	FJI
CHECKED	14/08/20	BME
APPROVED	14/08/20	JAV

DESCRIPTION: SYNTHESIZER 50 MHz - 40 GHz	REV.:	SHEET:
CODE: QP-FSPLL-0040-03	002	1 DE 1