

## Synthesized Signal Generator OF1480C



## **Description:**

Scientech offers a wide selection of high-performance general purpose synthesized signal generator with versatile modulation capability. Four modulation modes are offered: AM / FM /  $\Phi$ M / PM (QF1480 only have two modes of AM and FM). These instruments are suitable for wide variety applications ranging from Broadcasting TV, communication to radar , navigation and electron war etc .

These products are designed for manual as well as ATE applications and ideally suited for various test during product development. They are also the great help for manufacturing of RF communication products such as cellular radio, or cordless phones. Excellent pulse modulation specification (rise/fall time < 15ns and 80 dB on/off ratio) is suited especially for electron war such as radar / electron against, etc.

Remote programming via the standard GPIB Bus. They can store and recall for 50/100 complete front panel setting-up with internal non-volatile memory. built-in Microprocessor guarantees their advanced technical performance and use's convenience.

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## Main specifications

Model	QF1471	QF1480 B / C	QF1481A
Frequency			
Range:	3~ 520MHz	0.01 ~ 1050MHz	0.1 ~ 2100MHz
Resolution:	50Hz	10Hz	10 ~ 20Hz
Accuracy:	< ± 50 × 10 <sup>6</sup>	<±5×10 <sup>-6</sup>	< ± 5 × 10 <sup>-7</sup>
Switching speed:	< 70ms	<70ms	<70ms
INT ref.oscillator	10MHz	10MHz	10MHz
Aging rate:	10 × 10 <sup>-6</sup> / 15min.	< ± 5 × 10 <sup>-7</sup> /mon.	<2 × 10 <sup>-8</sup> / day.
Accuracy	<±5 × 10 <sup>-6</sup>	<±5×10°	< ± 5 × 10 <sup>-7</sup>
Output			
Range:	-127 ~ +13dBm	-127~ +13dBm	-137 ~ +13dBm (f> 1050MHz -137 ~ +16dBm (f< 1049MHz
Resolution	0.1dB	0.1dB	0.1dB
Accuracy:	± 2.5dB	± 1.5dB	< 1.5dB ( (> 1MHz) < 2dB ( (< 0.9999MHz)
R . P . P:	yes (25W 25Vpc)	yes (50W 25Voc)	yes (25W 25Vpc)
S.W.R:	≤ 1.6:1	≤ 1.5:1	≤1.5:1
Impedance:	50Ω(N)	50Ω(N)	50 Ω (N)
RF leakage:	<1uV	< 3uV	< 3uV
Spectral purity			
Harmonics:	<-30dBc	<-30dBc	<-30dBc (!>1MHz)
Non-harmonics	<-35dBc	< -60dBc	<-60dBc (offset>10KHz)
Sub-harmonics			<-45dB
SSB phase noise		< -122dBc/Hz	< -122dBc / Hz
Residual FM	≤ 55Hz	< 12Hz (BW 0.3 − 3KHz)	<6Hz (BW 0.3 ~ 3KHz)
Residual AM	≤ 0.2%	<-60dBc	<-60dBc (BW 0.05 ~ 15KHz
AM modulation	Children are in		
Depth:	0 ~ 99% ( ≤ +7dBm)	0 ~ 99% (step 1%)	0 ~ 99% (step 1%)
Resolution:	0.1% (AM < 10%) 1% (AM > 10%)	1%	1%
Accuracy:	8% (at 1KHz)	< 5% (AM<90%)	± 2%+4% of setting
Distortion:	≤2% (at 1KHz)	<1.5% (AM<30%)	1.5% (AM<30%)
Incidental FM	≤300Hz	0.3fm	0.3fm ~ 0.6fm
INT modulation: fm	1KHz or 400Hz	1KHz or 400Hz	1KHz or 400Hz
EXT modulation:fm	20Hz ~ 20KHz	20Hz ~ 30KHz	20Hz ~ 50KHz

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