

PC Programmable Sources

ANS3 Series



- 65 MHz to 5875 MHz
- Frequency & Level Control
- With Modulation/Trigger
- Directly PC Programmable - RS232
- 1KHz Steps
- 7dBm Output Power
- +/- 1 ppm Stability
- Low Cost & Compact Size
- Wide Tuning Ranges
- Low Phase Noise
- Non-Volatile Memory

The ANS3 series of programmable, synthesised RF signal sources feature frequency and level control with modulation and, with a standard office PC, provide a turn-key solution to the provision of variable frequency sources for both systems and test equipment applications. Directly connecting to the PC serial port, each unit can be set to frequencies within ranges listed below and at levels up to 8dBm via an easy to use control panel software and the non volatile memory enables the selected settings to be retained in the stand alone unit. Each unit contains a +/-1ppm stability reference TCXO but can also be used with an external reference. The sources are supplied complete with a 9V d.c. wall mount power supply, operating software and special interface cable.

General Specifications (also see options)	
Output Frequency	65 MHz to 5875 MHz in ranges
Frequency Stability	+/-1ppm max. over 0+50C
Internal Ref. Aging	+/-1ppm max./year
Internal Ref. Accuracy	+/-1ppm @ +23 +/-2 deg.C
Internal Ref. Output	0 to +2dBm into 50 ohms
External Ref. Frequency	As Internal Reference
External Ref. Level	0.6-2.5 Vpp
External Ref. Impedance	600 ohms in parallel with 25pF
Reference Select	Miniature Toggle Switch
Output Power	+5dBm min, +7dBm typ.
Level Control Range	25dB min in 31 steps
Control Interface	Serial RS-232
Modulation Rate	1 KHz internal 50KHz max. external
Modulation Deviation	+/-1.25 MHz
Input Voltage	+8 to +12 V d.c. @ 300 mA
Operating Temperature	0+50C
Storage Temperature	-20+70C
Lock Time	2 to 6 msec. typ.
Status LED's (green)	RF On, Phase Lock, DC Applied
RF Output Connector	SMA female
Ref. Connector	SMA female
Trigger/Modulation Connector	SMA female
Input Power Connector	1.3 x 9.0mm centre positive jack
Data Connector	DB-9P
RF Output Modes	Continuous, Momentary & Toggled
Output Impedance	50 ohms
Size	90 x 70 x 19mm (excluding connectors)
Weight	170g
Housing	Aluminium with White Epoxy Paint

Equipment Supplied as Standard:

- Synthesised Source
- Power Supply (Euro, UK or US style)
- Control Software (CD)
- Special Serial Port Cable
- Operating Manual (CD)
- Spare DC Connector

Custom Options:

- Delete Power Supply
- Custom Frequency Range (subject to restrictions)
- Custom Step Size (subject to restrictions)
- Mounting Plate
- Instrument or Rack Mounting in Single or Multiple Units
- Extended Temperature Range

PC Requirements:

- Pentium, Equivalent or Higher
- Running Windows 95 or higher
- 16 MB RAM
- 25 MB Hard Disk Space
- CD Rom
- 9 Pin, D-Sub, Serial Port

Model No	Freq. Range (MHz)	Freq. Steps (KHz)	Freq. Stability (ppm)	Int. Ref. Freq. (MHz)	Output Power typ. (dBm)	Harmonics (dBc)	Spurious (dBc)	Phase Noise			Current @+9V d.c. (mA) max.
								@1KHz (dBc/Hz)	@10KHz (dBc/Hz)	@100KHz (dBc/Hz)	
ANS3-0065-001	65-95	1.0	±1	5	+7	-35	-60	-67	-92.5	-115	300
ANS3-0120-001	120-160	1.0	±1	10	+7	-35	-60	-90	-96	-116	300
ANS3-0160-001	160-220	1.0	±1	10	+7	-35	-60	-90	-94	-117	300
ANS3-0220-001	220-350	1.0	±1	10	+7	-35	-60	-86	-90	-119	300
ANS3-0350-001	350-620	1.0	±1	10	+7	-35	-60	-73	-84	-108	300
ANS3-0500-001	500-800	1.0	±1	10	+7	-35	-60	-74	-80	-106.5	300
ANS3-0800-001	800-1200	1.0	±1	10	+7	-35	-60	-77	-80	-106	300
ANS3-1200-001	1200-2000	1.0	±1	10	+7	-35	-60	-73	-82	-105	300
ANS3-1750-001	1750-2500	1.0	±1	10	+7	-35	-60	-72	-82	-108	300
ANS3-2000-001	2000-3000	1.0	±1	10	+7	-35	-60	-73	-79	-101.5	300
ANS3-2400-001	2400-3400	1.0	±1	10	+7	-35	-60	-72	-78	-102	300
ANS3-3400-001	3400-3700	1.0	±1	10	+7	-35	-60	-70	-78	-109	300
ANS3-3700-001	3700-4200	1.0	±1	10	+7	-35	-60	-67	-75	-103	300
ANS3-5150-001	5150-5350	1.0	±1	10	+7	-35	-60	-67	-75	-103	300
ANS3-5470-001	5470-5875	1.0	±1	10	+7	-35	-60	-61	-71	-96	300

We reserve the right to change standard product specifications without notice but will be pleased to consider control drawings for quotation.