

Bird® 7020 Series Power Sensor

Bird's® new 7020 Power Sensor is an economical plug and play solution to your power measurement needs. The 7020 determines and reports Forward and Reflected True Average Power and VSWR over a wide frequency range of 350 MHz to 4.0 GHz. It also never requires field calibration, only requires factory calibration once per year, and is traceable to National Institute of Standards and Technology (NIST).

PROBLEMS

Have analog, digital, and multi-carrier signals to measure

Tight budget

Downtime is unacceptable

Varying field tech skill levels

Need confidence in measurement

SOLUTIONS

Modulation independent measurements

Inline device, no directional coupler required

Complimentary Virtual Power Meter (VPM2) application

Monitor and perform maintenance for monitoring while DUT is in-service

Measure forward and reflected power to troubleshoot system failures

Sensor plugs and plays with multiple display devices.

No field calibration required
NIST traceable calibration



APPLICATIONS

WPS measures: Analog Cellular, Digital Cellular, 3G, 4G, Tetra, APCO/P25, Trunking, CDMA, TDMA, WCDMA, GSM, Transportation, Tactical Military, Radar, Avionics, Marine, LMR, Analog Broadcast, Digital Broadcast, GSM, GPRS, EDGE, UMTS, HSDPA, Bluetooth, Fire, GPS, NPSPAC, Paging, Project 25, Public Safety, Telematics, Utilities, WIMAX and WLAN.

Measurements performed: Forward and Reflected
Calculations Performed: VSWR and True Average Power

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SPECIFICATIONS

Frequency Range	350 MHz - 4.0 GHz
Power Measurement Range	0.15 W to 150 W
Measurement Accuracy	+/- (4% of reading + 0.05 W) (above 35 °C or below 15 °C add 3%)
Min, Forward Power for Reflected Measurement	5.0 W
Peak/Average Ratio, Max	12 dB
Insertion Loss, Max:	0.1 dB
Insertion VSWR	1.10 max
Impedance, Nominal	50 ohms
Response Time	3 sec
VSWR Range	1.15 to 99.9
RF Connector	N Female
Directivity, Min:	28 dB
Recommended Calibration Interval	Annually

POWER SUPPLY

Source	5Vdc from USB host
Current Draw	35 mA

INTERFACE

Protocol	USB 2.0
Connector	USB Type 'B' with "SeaLATCH" locking USB connector
Data Logging	with VPM2 Software

STANDARDS COMPLIANCE

CE	European Standard EN 61326-1:2006 – Electronic Equipment for Measurement, Control and Laboratory Use – EMC Requirements in accordance with EMC Directive (2004/108/EC)
RoHS	Compliant
Upgradability	Firmware field-upgradable via the USB port

MECHANICAL AND ENVIRONMENTAL

Dimensions, Nominal	4.8" x 2.2" x 1.3" (122mm x 54mm x 32mm)
Weight, nominal	0.8 lbs (0.36 kg)
Shock	Mil-PRF-28800F Class 3
Vibration	Mil-PRF-28800F Class 3
Operating Temperature	-10 to +50 °C (+14 to +122 °F)
Storage Temperature	-40 to +80 °C (-40 to +176 °F)
Humidity, Max	95% (non-condensing)
Altitude, Max	4,572 m (15,000ft)

STANDARD ACCESSORIES (Included)

5A2653-10L2	Sealatch USB Cable
VPM2	Virtual Power Meter
920-7020S	Instruction Manual (Sensor)
920-VPM2	Instruction Manual (VPM2)

OPTIONAL ACCESSORIES (Not Included)

PTA-MNMN	Adapter
PTA-MNME	Adapter
PTA-MNFE	Adapter
5A2653-10	USB Cable, 10m

COMPATIBLE DEVICES

SA-XT Series	Site Analyzer
VPM2	Virtual Power Meter
5000-XT	Digital Power Meter



YOU'RE HEARD, LOUD AND CLEAR.

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