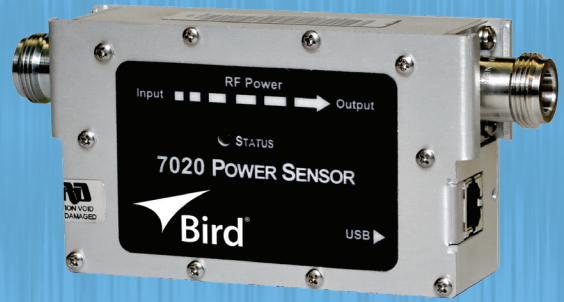




7020 Series Power Sensor



The RF Experts

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 25 MHz to 1.0 GHz or 350 MHz to 4.0 GHz. It also never requires field calibration, factory calibration suggested once per year, the sensors are traceable to National Institute of Standards and Technology (NIST).

PROBLEMS/SOLUTIONS

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

- Modulation independent measurements

Tight budget

- Inline device, no directional coupler required
- Complimentary Virtual Power Meter (VPM2) application

Downtime is unacceptable

- Monitor and perform maintenance for monitoring while DUT is in-service
- Measure forward and reflected power to troubleshoot system failures

Varying field tech skill levels

- Sensor plugs and plays with multiple display devices

Need confidence in measurement

- 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	
7020-1-030301	25 MHz - 1.0 GHz
7020-1-010101	350 MHz - 4.0 GHz
Power Measurement Range	
7020-1-030301	0.5 W to 500 W*
7020-1-010101	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	100 ms
VSWR Range	1.15 to 99.9
PIM Rating	-130 dBc @ 460 MHz
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 VPM3 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 2.6" x 1.3" (122mm x 66mm x 32mm)
Weight, nominal	1.0 lbs (0.45 kg)
Shock	Mil-PRF-28800F Class 3
Vibration	Mil-PRF-28800F Class 3
Operating Temperature	-30 to +60 °C (-22 to +140 °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)

5A2653-6L2	Sealatch USB Cable
VPM3	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

COMPATIBLE DEVICES

SA-XT Series	Site Analyzer
VPM3	Virtual Power Meter
5000-XT	Digital Power Meter
Bird RF Meter	Android App

* Derate maximum average power rating from 500W at 300MHz to 100W at 1GHz using a straight line on a log-log scale.

