DPS-100D Generation II Series
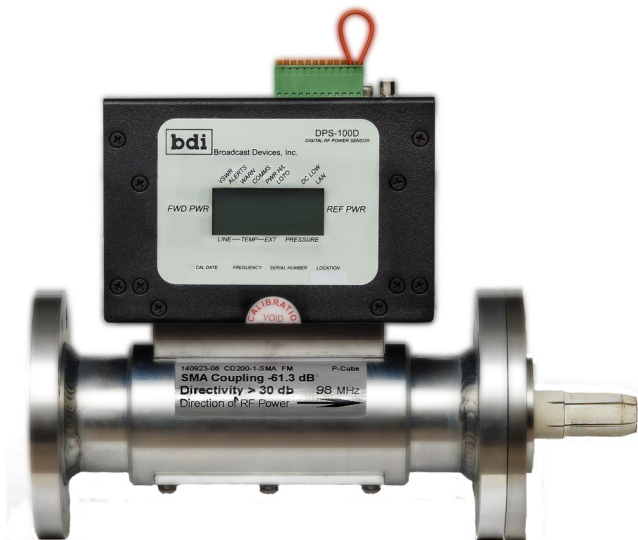# True RMS Power Meter

bdi

True RMS Power Measurement

Basic Description:

The DPS-100DSeries True RMS Power Meter provides true RMS RF Power measurement capability with pin point accuracy.

Key Features:

DPS-100D Key Features Include: Simultaneous Forward/Reflected Power Indication, Onboard Backlit LCD Display with proprietary 3-Strike VSWR Protection™ system for sustained high VSWR conditions, Transmission Line Surface Temperature Indication – Second Temperature Sensor input available* - Transmission Line , Pressure indication** Phantom Powered RS-485 Communications "BDI bus" for easy interconnection of other sensors using industry standard category 5 cabling powered from the BDI available accessories including the RMD-100 Remote Meter Display, the SWP Series motorized switch controllers/remote controls and the SWP-206D Antenna Monitor System available from BDI - Operate standalone or part of a larger system with up to 8 additional DPS-100D sensors. Analog 0-5 VDC scaled outputs of power indication for legacy remote control input, 6 Programmable General Purpose inputs for interlock lock out tag out status, remote reset etc. 2 – Form C programmable relays for interlock and alarm indication, Additional Forward/Reflected Sample Ports can be ordered as an option—specify coupling level from –40 to –70 dB

* Second temperature indication requires the use of BDI P/N TMP-100 temperature sensor

**Requires use of the BDI P/N PSW-100 pressure sensor and requires a suitable gas termination such as the ERI gas barrier assemblies. These gas barrier assemblies are available in many line sizes including 1-5/8", 3-1/8", 4-1/6", 6-1/8", 8-3/16" and 9" EIA transmission line sizes. Contact the factory for more information.

Electrical Specifications:

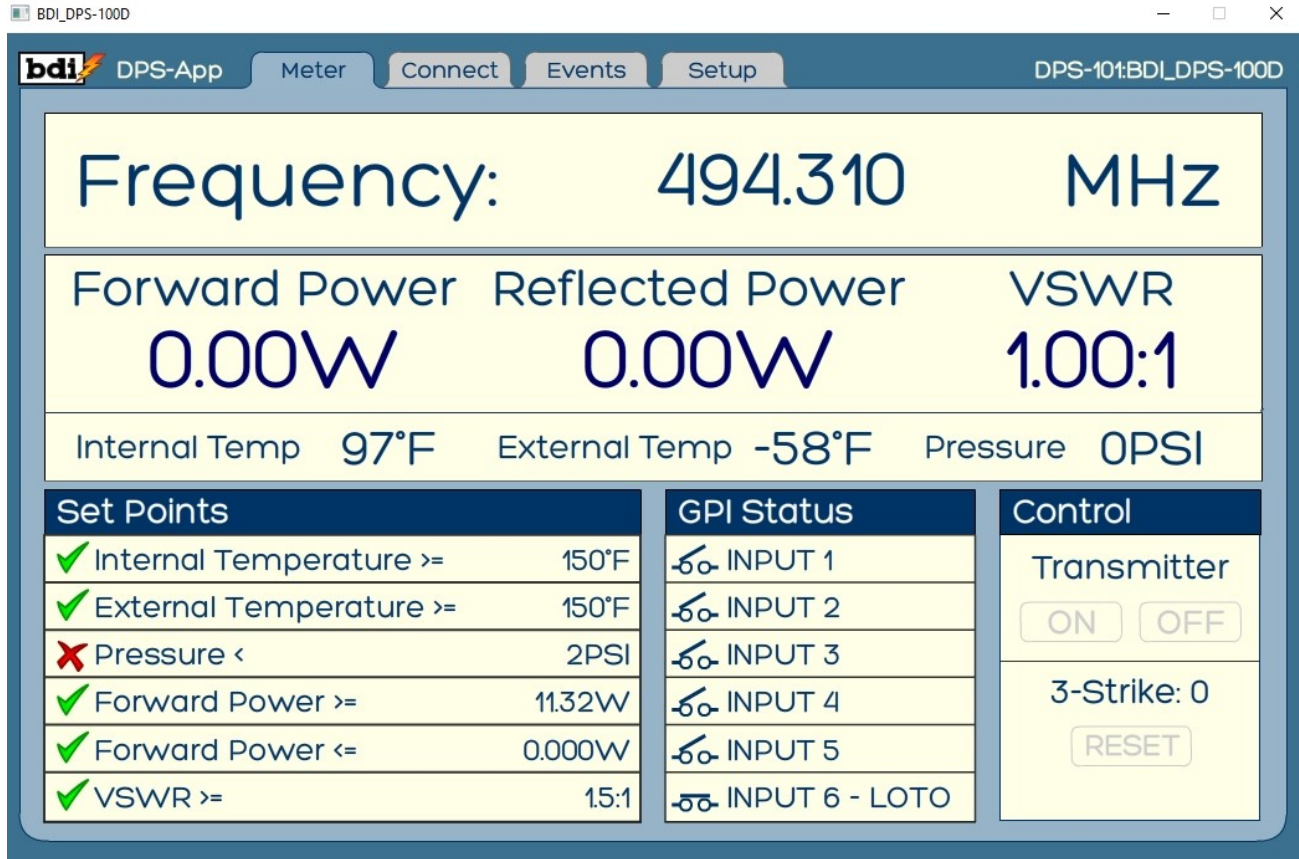|	
Frequency Range:	Sensor: 0.5 MHz—4GHz—Model Dependent
Through Line VSWR:	1.05:1 or better Coupled Port
Directivity:	30 dB or better
Impedance:	50 ohms through port
Measurement Type:	True RMS – Suitable for CW, multi carrier and high crest factor digital RF signals such as AM/FM, 8 VSB (ATSC 1.0/3.0), DVB-T, ISDB-T, DTMB, IDRM, IBOC (in band on channel Ibiquity standard). DAB, etc.
Accuracy:	+/- 5% of indicated reading maximum error within instrument dynamic range.
	Dynamic Range: 40db or better Linear dynamic Range.
Power Measurement Range 0 – 2.5 Mega watt	Model and Coupler Line Size Dependent
Measurement Capabilities:	Forward and Reflected RF Power, Transmission line temperature (Deg F / Deg C user selectable) 1 each – External Temperature and line pressure sensors. 6 – User configurable closure inputs. (typically patch panels, lock-out/tag-out) Integrated Digital Display: 2 Line x 16 character LCD display of Fwd/Ref RF Power, Temperature (x2), Line Pressure Dedicated Icons for VSWR fault, Alert Status, Communications Status, RF Power High/Low thresholds, DC power input status and LAN connection status.
Communications Interfaces:	Ethernet, RS-485, Network Protocols: SNMP, SMTP, TCP/IP, UDP, SNTP, 2 – Configurable VDC proportional power outputs, 2 – Form C configurable interlock/status relays/On/off 2 – Configurable External GP inputs for fault reset 12 Position Terminal Block: 6 – Configurable General Purpose Inputs for lock out tag out, patch panel, external interlock strings, etc. Ext. Temperature ensor Input3 – Position terminal block mates with BDI TMP-100 T

Physical Specifications:

Sizes:

	N, DIN, 7/8" 1-5/8", 3-1/8" EIA, 4-1/16" Myat standard, 4-1/16" Dielectric standard, 6-1/8", 9" and 12" special order. Flanged – One fixed, one swivel

Environmental Specifications:

Operating Temperature:	-25°C to +55°C
Storage Temperature:	-60°C to +85°C
Humidity:	95% Non-Condensing

The DPS-100D Series power meters are supplied with an easy to read main screen for all important parameters including power, VSWR, general purpose input status, 3-Strike VSWR Protection System™, two temperature indications and transmission line pressure indication. All of this on a single, easy-to-read screen. There is also provision for controlling the On/Off function of a transmitter with the two available programmable relays. Of course the DPS-100D series power meters are SNMP v2 compatible so they interface seamlessly with all modern remote control systems and third part SNMP software packages.

Available Accessories which can be seen on our website:

TMP-100 Temperature Sensor

PSW-100 Transmission Line Sensor

RMD-100 Remote Meter Display

SWP Series Motorized Switch and Remote Controls

SWP-206D Antenna Monitor System

IOX-24 24 Channel Relay Output/Status, Analog Input Remote Control Panel