

SOL8SDR2x1W-P

SOLO8 Software Defined Radio 2x1W Plain

Overview:

The SOL8SDR2x1W-P is a compact software defined radio transceiver with 2x1W RF output power. Leveraging DTC's industry-leading MeshUltra™ waveform and also capable of operating as a unidirectional COFDM Transmitter or Receiver, the SOL8SDR2x1W-P is ideally suited for UxV and commercial applications.

The SOL8SDR2x1W-P also includes a rich set of interface options including native Ethernet, dual USB and serial as well as an audio headset interface.

The SOL8SDR2x1W-P also offers the option of USB-C powering direct from a suitable end user device or USB-C battery (USB PD compliant).



Features and Benefits:

- 2x1W transceivers for use as IP Mesh radio, COFDM transmitter or receiver
- Optional AES128/256 encryption (accredited to FIPS140-2 for MeshUltra™ waveforms)
- USB-C power option compliant with USB PD
- RNDIS support for Ethernet over USB
- USB support for peripherals such as 3G/4G/Wi-Fi dongles
- Ethernet and RS-232 data connectivity
- 128GB in-built SD card storage
- Compact enclosure
- Very low power consumption, typically 12W IP Mesh

Product Information:

Product Codes

SOL8SDR2x1W-P-120170	SOL8SDR, 2x1W Plain, 1.20-1.70GHz
SOL8SDR2x1W-P-178229	SOL8SDR, 2x1W Plain, 1.78-2.29GHz
SOL8SDR2x1W-P-198270	SOL8SDR, 2x1W Plain, 1.98-2.70GHz
SOL8SDR2x1W-P-440500	SOL8SDR, 2x1W Plain, 4.40-5.00GHz
SOL8SDR2x1W-P-550600	SOL8SDR, 2x1W Plain, 5.50-6.00GHz

Product Includes

CA0002	12V DC power lead Lemo to banana plugs
CA3172	12V 6.67A 80W PSU with Lemo

Accessories (sold separately)

AP007377	USB-A (m) to USB micro-B (m) cable
AP010399	USB-A (m) to USB-C (m) cable
CA3978	6-way Lemo to 9-way D-sub (f) RS232/GPIO cable
CA3986	6-way Lemo to 9-way D-sub (f) RS-232 cable

SOL8SDR2x1W-P

SOLO8 Software Defined Radio 2x1W Plain

Technical Specification:

IO

RF COFDM transceiver A	SMA 50Ω (female)
RF COFDM transceiver B	SMA 50Ω (female)
Power input	4-way circular USB2 with power delivery (USB PD)
Gigabit Ethernet	RJ45
USB1 control and download	USB Type-A
USB2 control and download	USB Type-C
Analogue audio	3.5mm jack
GPIO and RS-232 serial	6-way circular

COFDM Transceivers

Application license	SDRAPP-MESH, SDRAPP-TX
Power	1W (+30dBm) max per output, 2W total
Power step	0.25dB incremental control
Tuning step	125kHz

Receiver

Application license	SDRAPP-RX
Sensitivity	Up to -110dBm
Streaming output	Single service (first received)
Tuning range	Frequency variant dependent
Tuning step	125kHz
Receive input level	+20dBm max

Audio

Application license	SDRAPP-MESH, SDRAPP-TX
Interface	Analogue mic/head with bias
Compression	G726 32kbit audio 8kHz sampling and mute
Input level (600Ω impedance)	0.25mV to 1.14V RMS
Output level	32mW RMS max into a 16Ω load

Data

Data configuration	1k2 to 115k2, 7/8 bit, no/odd/even parity
Data interface	RS-232 or USB peripherals

Storage

Medium	Up to 128GB MicroSD (supplied) (>8 hours recording at max DVB-T bitrate) (>29 hours recording at max NB bitrate)
--------	--

Control

USB	PC application control and SD card mounting
Ethernet	PC application control and file download Web GUI control and file download
Access	User, Super User and Admin accounts

Physical

Dimensions	150mm (160mm incl. connectors) x 75mm x 24mm
Weight	462g approx.

Power

DC input	8-17V overvoltage protected up to 30V
USB PD input	5V (half RF power), 9V to 15V (full RF power)
Power consumption	12W RMS @13V 25% data occupancy 18W RMS @13V 100% data occupancy
Inrush current (power up)	10A @13V

Environment

Temperature range	-10°C to +55°C
Humidity	Less than 85% non-condensing

SOL8SDR2x1W-P

SOLO8 Software Defined Radio 2x1W Plain

Technical Specification (cont.):

Software License Options

SDRAPP-MESH	IP Mesh
SDRAPP-TX	COFDM Transmitter
SDRAPP-RX	COFDM Receiver
SDRAPP-IAS	Interference Avoidance Scheme for Mesh
SDRAPP-P2MP	Point-to-Multipoint System for Mesh
SDRAPP-L2BRIDGE	Transparent Layer 2 Bridging Mode for Mesh
SDRAPP-LOWBIT	Low Bitrate Video Encoding
SDRAPP-IPX	IP Encapsulation for COFDM
SDRAPP-SNAPSHOTS	Triggered JPEG Stills with Associated Timestamps
SDRAPP-GOLD	Gold-TX, Gold-RX, MESH, IAS, IPX
SDRAPP-PLATINUM	Platinum-TX, Platinum-RX, MESH, IAS, IPX, LOWBIT, P2MP, RANGING
†AES128	AES128 Cryptography Licence
†AES256	AES256 & AES128 Cryptography Licence

Note: Refer to separate datasheets for SDRAPP requirements

† Accredited to FIPS140-2 for MeshUltra™ waveforms

Encrypted products are subject to regulatory export controls

For further information contact your Sales Account Manager, one of our Regional Sales Offices, or email solent.info@domotactical.com

AMERICA
T: +1 571 563 7077

UK
T: +44 1489 566 750

DENMARK
T: +45 8791 8100

UAE
T: +971 0 44 53 72 01

SINGAPORE
T: +65 6339 0508

AUSTRALIA
T: +61 8 8305 0311