

SOL8SDR2x2W-P

SOL8 Software Defined Radio (Plain)

Overview:

The SOL8 Software Defined Radio is an COFDM digital video transceiver from Domo Tactical Communications (DTC), designed specifically for Point of View (PoV), body worn and concealment applications.

The SOL8SDR Plain provides a compact higher power solution (2x2W) for increased range and enhanced connectivity with native RJ45 and USB as standard.

Dependent on the applications loaded the platform can operate as a Transmitter, Receiver, Dual Encoder and IP Mesh Radio node. Further information on software capability can be found in the SDRAPP datasheets.



Features and Benefits:

Dual high profile HD H.264 independent video encoders
2x2W COFDM transceivers for use as COFDM Transmitter, Receiver or IP Mesh

ISM band telemetry transceiver for control, PTZ and low power standby

Dual SD/HD-SDI video inputs for recording, transmission and analysis

Microphone inputs and headphone output for recording, transmission or talkback

Growing USB support for peripherals such as 3G/4G/Wi-Fi dongles

Ethernet, RS232 and RS485 connectivity and 128GB built in storage

Higher power packaging without the need for breakout cables

Very low power consumption: typically 12.5W

Exceptionally small size: 200mm x 100mm x 27mm

Weighs only 950g

Product Information:

Product Includes

CA0002	12V DC power lead Lemo-wire 3m
CA2396 x 2	DIN 1.0/2.3 to BNC female cable
CA3172	12V 6.67A 80W PSU with 4-way Lemo plug
SA4233	SOL8SDR-P support USB stick

Accessory Options (sold separately)

AP009131	GPS receiver/antenna with type-A USB
CA0474	RS232/RS485 data cable
SOL8SDR2x2W-P-HSK	Passive heatsink accessory for SOL8SDR2x2W-P

Related Documents

Resource ID 100217	SOL8SDR Hardware and Basic Setup Guide
--------------------	--

SOL8SDR2x2W-P

SOL08 Software Defined Radio (Plain)

Technical Specification:

Interfaces

RF COFDM transceiver 1	SMA (female)
RF COFDM transceiver 2	SMA (female)
RF telemetry transceiver	SMA (female)
Video SD/HD-SDI 1	DIN 1.0/2.3 (female)
Video SD/HD-SDI 2	DIN 1.0/2.3 (female)
USB host	USB 2.0 type A
Power input	4-way Lemo
Power output	9-way D-sub
Microphone/line input	3.5mm socket
Headphone output (mono)	3.5mm socket
PTZ control or data IO	9-way D-sub
Gigabit Ethernet	RJ45

COFDM Transceivers

Required application	*SDRAPP-TX or *SDRAPP-MESH
Power	2W (+33dBm) per output, 4W total
Power step	0.25dB incremental control
Tuning range	Frequency variant dependent
Tuning step	125kHz

Telemetry Transceiver

Required application	*SDRAPP-TX
Power	+11dBm frequency dependent
Tuning range	Frequency variant dependent
Receiver sensitivity	-114dBm

Receiver

Required application	*SDRAPP-RX
Sensitivity	Up to -110dBm
Streaming output	Single service (first received)
Tuning range	Frequency variant dependent
Tuning step	125kHz

Video

Required application	*SDRAPP-ENC
Digital input	Dual SD/HD-SDI (supports SOL8SDI for HDMI or composite)

Audio

Required application	*SDRAPP-ENC or *SDRAPP-MESH
Headphone output	Mono headphone driver
Analogue input	High gain microphone stereo pair 10V microphone bias on inputs
Digital input	SD/HD-SDI de-embedding

Data

Data configuration	1k2 to 115k2, 7/8 bit, no/odd/even parity
Data interface	RS232 or RS485 or USB peripherals

Storage

Medium	Internal microSD 128GB (>8 hours recording at max DVB-T bitrate) (>29 hours recording at max NB bitrate)
--------	--

Control

Ethernet	PC application control and file download Web GUI control and file download
Access	User, Super User and Admin accounts

Physical

Dimensions	L 200mm, W 100mm, H 27mm (not including connectors)
Weight	950g

Power

DC input	8V to 18V reverse polarity protected
DC output	1A pass-through (switchable) 5V regulated output limited to 1A (switchable)
Camera/adaptor power	5V over video input (switchable)
Typical power consumption	12.5W (SD), 13.5W (HD), 14.5W (Dual), 19.5W (MIMO Mesh)

SOL8SDR2x2W-P

SOL08 Software Defined Radio (Plain)

Technical Specification (con't):

Environment

Temperature range	-10°C to +50°C with additional cooling
Humidity	Less than 85% non-condensing
Cooling	External heatsink required for some modes
Sealing	IP54
EMC conformance	CE marked

Frequency

132043	1.14-1.50GHz + 433.05-434.79MHz tel.
132086	1.14-1.50GHz + 863-870MHz tel.
201043	1.67-2.35GHz + 433.05-434.79MHz tel.
201086	1.67-2.35GHz + 863-870MHz tel.
201091	1.67-2.35GHz + 902-928MHz tel.
234043	1.98-2.70GHz + 433.05-434.79MHz tel.
234086	1.98-2.70GHz + 863-870MHz tel.
234091	1.98-2.70GHz + 902-928MHz tel.
470043	4.40-5.00GHz + 433.05-434.79MHz tel.
470086	4.40-5.00GHz + 863-870MHz tel.
470091	4.40-5.00GHz + 902-928MHz tel.

Software License Code

*SDRAPP-MESH	SDR Application IP Mesh NETNode
*SDRAPP-IAS	SDR Application Interference Avoidance Scheme
*SDRAPP-ENC	SDR Application IP Encoder
*SDRAPP-TX	SDR Application COFDM Transmitter
*SDRAPP-RX	SDR Application Receiver
SDRAPP-GOLD	All Gold level SDRAPPs (incl. MESH)
SDRAPP-PLATINUM	All Platinum level SDRAPPs (incl. MESH/IAS)
AES128TX	AES 128-Bit Encryption
AES256TX	AES 256-Bit and 128-Bit Encryption

* Refer to separate datasheets for SDRAPP requirements

Export of encrypted products is subject to United Kingdom regulatory export controls.

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

DTC – Herndon (Headquarters)
2303 Dulles Station Boulevard
Suite 205
Herndon, VA
20171, USA

T: +1 800 665 4648

DTC – Tampa
3845 Gateway Centre Boulevard
Suite 360
Pinellas Park, FL
33782, USA

T: +1 727 471 6900

DTC – Solent
Fusion 2, 1100 Parkway
Solent Business Park
Whiteley, Hampshire
PO15 7AB, UK

T: +44 1489 566 750

DTC – Randers
Haraldsvej 64B
DK-8960
Randers SØ
Denmark

T: +45 8791 8100

DTC – Singapore
21 Media Circle
Infinite Studios #05-06
Singapore
138562

T: +65 6339 0508