DTC

SOL8SDR2x2W-P
SOLO8 Software Defined Radio (Plain)

Overview:

The SOLO8 Software Defined Radio is an ultra-miniature COFDM digital video transceiver from Domo Tactical Communications (DTC), designed specifically for Point of View (PoV), body worn and concealment applications. Dependent on the applications loaded the platform can operate as a Transmitter, Receiver, Dual Encoder, Standard IP Mesh and MIMO IP Mesh. Further information on software capability can found in the SDRAPP datasheets.

Three enclosure variants are available: Concealment (-C), Robust (-R), Plain (-P).

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

Features and Benefits:

Dual high profile HD H.264 independent video encoders (NEW)

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
SOL8SDR2x2W-P-HSK	Passive heatsink accessory for SOL8SDR2x2W-P

Related Documents

100217	SOL8SDR Hardware and Basic Setup Guide

Domo – Video, IP and Sensors

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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/adapter power	5V over video input (switchable)
Typical power consumption	12.5W (SD), 13.5W (HD), 14.5W (Dual), 19.5W (MIMO Mesh)

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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
201043	1.67-2.35GHz + 433.05-434.79MHz
201091	1.67-2.35GHz + 902.00-928.00MHz
234043	1.98-2.70GHz + 433.05-434.79MHz
234091	1.98-2.70GHz + 902.00-928.00MHz
470043	4.40-5.00GHz + 433.05-434.79MHz
470091	4.40-5.00GHz + 902.00-928.00MHz

Software License Code

SDRAPP-ENC*	SDR Application IP Encoder
SDRAPP-TX*	SDR Application COFDM Transmitter
SDRAPP-RX*	SDR Application Receiver
SDRAPP-MESH*	SDR Application IP Mesh NETNode
SDRAPP-GOLD	All Gold level SDRAPPs (ENC/TX/RX/MESH)
SDRAPP-PLATINUM	All Platinum level SDRAPPs (ENC/TX/RX/MESH)
AES128TX	AES 128-bit Encryption License
AES256TX	AES 256-bit Encryption License

* 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

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