

SDR TRANSCEIVER

SDR2X2W-P



The 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 SDR 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.

KEY FEATURES

- 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

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
SDR2x2W-P-HSK	Passive heatsink accessory for SDR2x2W-P

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TECHNICAL SPECIFICATIONS

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

Application license	*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)
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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

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TECHNICAL SPECIFICATIONS

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	IP Mesh
*SDRAPP-IAS	Interference Avoidance Scheme for Mesh
SDRAPP-L2BRIDGE	Transparent Layer 2 Bridging Mode for Mesh
*SDRAPP-TX	COFDM Transmitter
*SDRAPP-ENC	IP Encoder
*SDRAPP-RX	COFDM Receiver
SDRAPP-IPX	IP Encapsulation for COFDM
SDRAPP-GOLD	Gold-TX, Gold-RX, Gold-ENC, MESH, IAS, IPX
SDRAPP-PLATINUM	Platinum-TX, Platinum-RX, Platinum- ENC, MESH, IAS, IPX
AES128TX	AES 128-Bit Encryption
AES256TX	AES 256-Bit and 128-Bit Encryption

* Refer to separate datasheets for SDRAPP requirements