

SOL8SDR-M

SOLO8 SDR OEM Module

Overview:

DTC's SOL8SDR-M module is a miniature Software Defined Radio transceiver, designed specifically for size and weight critical UxV applications and is particularly suitable for small drone platforms. Based around DTC's game-changing SOL8SDR architecture and offering up to 2x200mW of output power (frequency dependent), the SOL8SDR-M provides access to a wide range of IP Mesh and unidirectional COFDM waveforms, including DTC's latest MeshUltra™. With two USB interfaces capable of supporting USB cameras and headsets as well as Wi-Fi, cellular and Ethernet dongles, SOL8SDR-M can also be connected to a range of host devices using RNDIS Ethernet over USB connectivity.



Product Information:

Product Code

SOL8SDR-M-120170	SDR-M 2x100mW 1.20-1.70GHz
SOL8SDR-M-167235	SDR-M 2x200mW 1.67-2.35GHz
SOL8SDR-M-210250	SDR-M 2x200mW 2.10-2.50GHz
SOL8SDR-M-420520	SDR-M 2x100mW 4.20-5.20GHz

Features and Benefits:

- Up to 2x200mW COFDM transceivers (frequency dependent)
- Growing USB support for peripherals such as 3G/4G/ Wi-Fi dongles
- RNDIS support for Ethernet over USB
- Optional AES128/256 encryption (accredited to FIPS140-2 for MeshUltra™ waveforms)
- 128GB built-in storage
- Compact packaging with ultra-miniature connectors
- Low power consumption - typically 4W (2x200mW) not including camera
- Exceptionally small size and weight

Product Includes

CA3740	5-way JST to USB A socket cable
CA3742	5-way JST to USB micro socket cable
CA4004	4-way Molex to 2-way Micro-Fit power cable
CA4017	2-way Micro-Fit to banana plugs power cable

Accessory Options (sold separately)

#AP001794	1dBi omni antenna 1.00-1.50GHz SMA (m)
#AP001901	2dBi omni antenna 2.00-2.50GHz SMA (m)
CA3752	MMCX (m) to SMA jack (f) cable 100mm
CA3903	MMCX (m) to SMA jack (f) cable 200mm
CA4237	MMCX RA (m) to SMA jack (f) cable 200mm
AP007377	USB A to micro USB B cable
CA3983	5-way JST to USB Ethernet adaptor
CA4005	2-way Micro-Fit to 7.4V slimline battery
CA4006	2-way Micro-Fit to 8.4V 1.3A battery charger
CA4016	2-way Micro-Fit to 12V 2A DC mains adapter
D740-OEM	5-way JST to RJ45 USB Ethernet adaptor
SA4525	Heat sink clamp
SOL8SDR-M-CACLAMP-50	Cable clamp for 50mm length SDR-M
SOL8SDR-M-CACLAMP-56	Cable clamp for 56mm length SDR-M
†SOL8SDR-M-CAKIT-A	Mains adapter kit (multi-country)
†SOL8SDR-M-CAKIT-B	Battery power kit (includes SA4525)

Two antennas required per module

† Refer to CAKIT guide for full details

SOLO8 SDR OEM Module

Technical Specification:

IO

RF COFDM transceiver 1	MMCX (female 50Ω)
RF COFDM transceiver 2	MMCX (female 50Ω)
Power input	Molex 4-way 1.25mm
USB1 control and download	JST 5-way 1mm
USB2 control and download	JST 5-way 1mm
GPIO	JST 6-way 1mm

COFDM Transceivers

Application license	SDRAPP-MESH, SDRAPP-TX
Power	100mW (+20dBm) per output, 200mW total 200mW (+23dBm) per output, 400mW total
Power step	0.25dB incremental control
Tuning step	125kHz
Receive input level	+20dBm max.

Power

DC input	6V to 18V reverse polarity protected
Power consumption (excluding cameras)	3W typical (2x100mW) 4W typical (2x200mW)

Storage

Medium	Internal microSD 128GB
--------	------------------------

Physical

Dimensions (120170/167235/420520)	56mm x 54mm x 11mm
Weight (120170/167235/420520)	62g approx.
Dimensions (210250)	50mm x 54mm x 11mm
Weight (210250)	60g approx.

Environment

Temperature range	-20°C to +50°C with additional cooling
Humidity	Less than 85% non-condensing

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 for Mesh
SDRAPP-L2BRIDGE	Transparent Layer 2 Bridging Mode for Mesh
SDRAPP-LOWBIT	Low Bitrate Video Encoding
SDRAPP-IPX	IP Encapsulation for COFDM TX or RX
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
BCRYPT128 (TX or RX)	BCrypt128 Cryptography Licence (US only)
BCRYPT256 (TX or RX)	BCrypt256 & BCrypt128 Cryptography Licence (US only)

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