

# SOL8SDR-M

## BluCore OEM Software Defined Radio Module

### Overview:

DTC's BluCore OEM is a ruggedized, 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 a full 2x100mW or 2x200mW of output power (frequency dependent), BluCore OEM 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, BluCore can also be connected to a range of host devices using RNDIS "Ethernet over USB" connectivity.



### Features and Benefits:

2x100mW or 2x200mW COFDM transceivers (frequency dependent)

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

128GB built-in storage

RNDIS support for Ethernet over USB

Compact packaging with ultra-miniature connectors

Low power consumption - typically 4W (2x200mW) not including camera

Exceptionally small size and weight

### Product Information:

#### Product Options

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

\* Future development

#### Product Includes

CA3897	4-way Molex to 4-way Lemo power cable
CA3827	4-way Lemo to banana plugs power cable
CA3740	5-way JST to USB A socket cable
CA3742	5-way JST to USB micro socket cable

#### Accessory Options (sold separately)

ANT1-100150	1dBi omni antenna SMA 1.0-1.5GHz
ANT2SMA-200250	2dBi omni antenna SMA 2.0-2.5GHz
CA3903	SMA jack to MMCX plug cable
AP009256	USB A 3.0 Gigabit Ethernet adapter
AP007377	USB A to micro USB B cable
CA3787	4-way Lemo to 7.4V slimline battery
CA3794	8.4V 1.3A battery charger with 4-way Lemo socket
CA3801	4-way Lemo to 12V 2A DC mains adapter
CA3983	5-way JST to USB Ethernet adaptor
SA4525	Heat sink clamp
SOL8SDR-M-CAKIT	Cable accessory kits to aid integration. CAKIT guide available.

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### 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

#### Power

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

#### Storage

Medium	Internal microSD 128GB
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#### Physical

Dimensions (120170/167235)	54mm x 55mm x 11mm
Weight (120170/167235)	62g approx.
Dimensions (210250)	54mm x 50mm x 11mm
Weight (210250)	60g approx.

#### Environment

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

#### 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-RX	COFDM Receiver
SDRAPP-IPX	IP Encapsulation for COFDM
SDRAPP-GOLD	Gold-TX, Gold-RX, MESH, IAS, IPX
SDRAPP-PLATINUM	Platinum-TX, Platinum-RX, MESH, IAS, IPX
AES128TX	AES 128-Bit Encryption
AES256TX	AES 256-Bit and AES 128-Bit Encryption

# Refer to separate datasheets for SDRAPP requirements

Export of encrypted products is subject to regulatory export controls.

For further information contact your Sales Account Manager, one of our Regional Sales Offices, or email [solent.enquiries@domotactical.com](mailto:solent.enquiries@domotactical.com)

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