

SDR TRANSCEIVER

SOL8SDR-M



KEY FEATURES

- 2x100mW COFDM transceivers
- 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
- Very low power consumption: typically 3W
- Exceptionally small size: 54mm x 50mm x 11mm
- Weighs only 60g

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 of output power, 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.

PRODUCT INFORMATION

CA3897	4-way Molex to 00 Lemo power cable
CA3827	00 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
AP001901	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	7.4V slimline battery
CA3794	8.4V 1.3A battery charger with 00 Lemo socket
CA3801	12V 2A DC mains adapter with 00 Lemo plug
SA4525	Heat sink clamp
SOL8SDR-M-CAKIT	Cable accessory kits (various) to aid integration. CAKIT guide available.

RELATED DOCUMENTS

Resource ID 100309	BluCore OEM Integration Document
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SDR TRANSCEIVER

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CODAN
COMMUNICATIONS



Domo Tactical Communications

TECHNICAL SPECIFICATIONS

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, SDRAPP-RX
Power	100mW (+20dBm) per output, 200mW total
Power setup	0.25dB incremental control
Tuning step	125kHz

POWER

DC input	6V to 18V reverse polarity protected
Typical power consumption	3W (excluding camera)

STORAGE

Medium	Internal microSD 128GB
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PHYSICAL

Dimensions	54mm x 50mm x 11mm
Weight	60g

ENVIRONMENT

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

FREQUENCY

120170	1.20-1.70GHz
*167235	1.67-2.35GHz
210250	2.10-2.50GHz

SOFTWARE LICENSE CODE

#SDRAPP-MESH	SDR Application IP Mesh NETNode
#SDRAPP-IAS	SDR Application Interference Avoidance Scheme
#SDRAPP-TX	SDR Application COFDM Transmitter
*#SDRAPP-RX	SDR Application Receiver
SDRAPP-IPX	SDR Application 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

* Future development

Refer to separate datasheets for SDRAPP requirements