

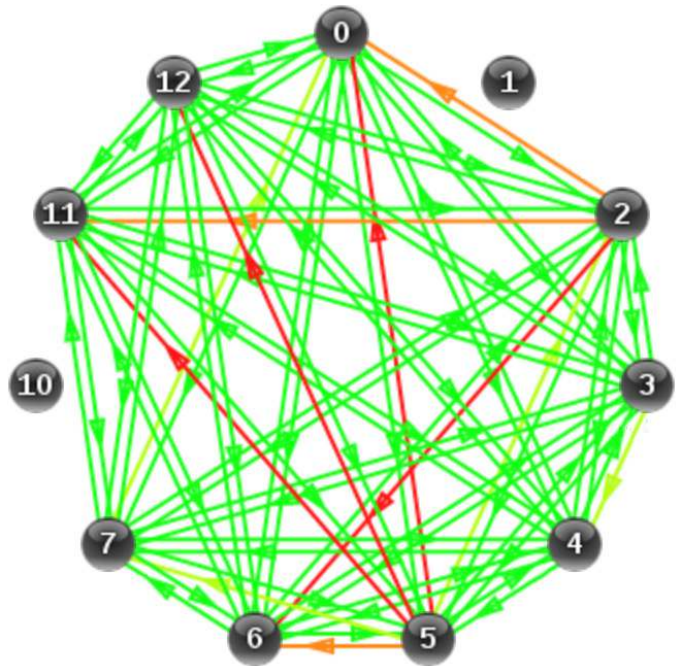
SDRAPP-MESH

SDR Application IP Mesh NETNode

Overview:

SDR applications can be used in combination with SOL8SDR products to add functionality.

NETNode IP radios can be combined in a fluid self-forming, self-healing Mesh network containing up to 20 nodes. The radios exchange bidirectional IP data in a single RF channel, simplifying frequency management. The entire Mesh can operate in a bandwidth between 1.25 and 20MHz and employs DTC's unique COFDM modulation scheme offering excellent RF penetration and performance in the presence of multipath. Multiple Input Multiple Output (MIMO) technology transmits two signals in the same channel almost doubling the available data capacity.



Features and Benefits:

- Self-forming, self-healing Mesh architecture
- Ideal for use for wide area coverage & multi-hop, mobile applications such as robotics
- Low latency IP communication
- Data capacity of 87Mb/s of IP data possible
- Software configurable RF bandwidth between 1.25MHz and 20MHz
- IP backhaul/central receive systems
- Interlink mode for enhanced capability and large scale systems
- Mission Commander compatible

Product Information:

Product Includes

SDRAPP-MESH	Software license only
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Accessory Options (sold separately)

AES128NN	AES NETNode 128 bit decryption
AES256NN	AES NETNode 256 bit decryption
MISCDRTAC*	Mission Commander Tactical application for desktop or tablet
MCS*	Mission Commander Strategic advanced client/server application
SDRAP-IAS*	SDR Application Interference Avoidance Scheme
SDRAPP-ENC*	SDR Application Encoder

* Refer to separate datasheets

Related Documents

100219	NETNode Phase 5 Software User Guide
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Technical Specification:

Mesh Modulation

Bandwidth	1.25, 1.5, 1.75, 2.5, 3.0, 3.5, 5.0, 6.0, 7.0, 8.0, 10.0MHz (video and IP Mesh) 12.0, 14.0, 16.0, 20.0MHz (IP Mesh only)
FEC rate	1/2, 2/3 (adaptive)
Carrier modulation	BPSK, QPSK, 16QAM, 64QAM (adaptive)
Standard Mesh capacity	Maximum 17 Mbps (TX/RX)
MIMO Mesh capacity	Maximum 87Mbps (TX) Maximum 44Mbps (RX)

Audio Talkback

Shared comms	Occupies microphone/headphone IO
Compression	G.726 32kbit/s, 8KHz sampling and mute

Data Interface

Routing protocol	UDP or TCP
Dedicated GPS interface	RS232, RS485 or USB

IP Encryption

Standard	DES 56-bit
Licensed (subject to export control)	AES 128/256-bit

Control

Local control	Power and Mesh status LED (SOL8SDR2x2W-P only)
Remote control	Web browser GUI Mission Commander - control of all parameters in a map based application

Software License Code

Silver (included)	Standard Mesh, MIMO Mesh, DES Mesh Encryption
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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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