MNet-32

Wireless mesh communication networks

Crosscom Solutions's MNet-32 is designed with multiple functions as a radio, repeater and mesh node with one frequency saving frequency resources. If function as a radio, it can make and receive calls, as repeater it can create a wireless mesh repeater network and as mesh node to route voice.

Digital Repeater Mesh Network

MNet-32 can create a wireless mesh repeater network up to 32 nodes. The mesh network is self-configuring and dynamic in which MNet-32 nodes are free to move.

Frequency Efficiency

Frequency becomes efficient by applying based on TDMA and FDMA technology, one frequency can be used to make calls and route voice at the same time, greatly saving frequency resources.

Rugged Meet Mil-STD

MNet-32 is strictly compliant with MIL-STD810 C/D/E/F/G standards and water and dust proof rating is up to IP67, ensuring outstanding performance even under harsh environments.

Rapid Deployment

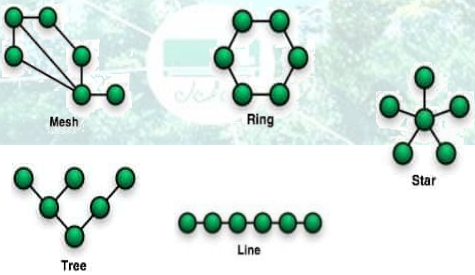
MNet-32 is ideal for rapid deployment in the field where limited coverage area is sufficient. MNet-32 resulted in innovative new technology that continues to advance radio communications capabilities for mission critical like military and law enforcement.

Multiple Networking Configuration

MNet-32 supports flexible and reliable networking, such as: chain, tree, star and mixed, so as to provide wider coverage.

SIM Card Embedded

MNet-32 will be embedded with GSM sim card, by interfacing MNet-32 with telephones, we can expand communication network and coverage.



Network Topology

Technical Data MNet-32

General data	
Protocol	DMR Tier II
Frequency ranges	350 – 400 MHz 410 – 470 MHz
Node capacity	32
Battery	185 Wh
Channel spacing	12.5 kHz
Input Voltage	90-264VAC 50Hz/12-36VDC
Charging Time	Rapid charge 2h 80%; 3h fully charged
Military Standard	MIL-STD-810 C/D/E/F/G; IP67
Frequency stability	± 0.5 ppm
Antenna impedance	50 Ω
Dimensions (H × W × D)	187 x 295 x 68 mm
Weight	3.6 kg - with battery
Carrying case	Transportable hardcase
Battery	≥ 10 hours

Environmental conditions	
Operating temperature range	-30 °C to +60 °C
Storage temperature range	-40 °C to +85 °C
Relative humidity	< 95%

Transmitter	
RF Power output	5W – 10W – 20W
Adjacent channel selectivity	60 dB at 12.5 kHz 70 dB at 25 KHz

Receiver	
Sensitivity	120 dBm
Intermodulation	≥ 70 dB
Spurious response rejection	70 dB
Blocking	≥ 84 dB
Conducted spurious emission	Antenna Port: 9kHz to 1GHz≤-57dBm, Standby: 1GHz to 12.75GHz≤-47dBm
Selectivity	60 dB at 12.5 kHz 70 dB at 25 kHz

All technical information was determined at the factory and in accordance with the corresponding standards. Subject to change on the basis of continuous development.

crosscom solutions

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