

UNI-MESH

Survey Equipment



Unique Group has developed the Uni-Mesh to complement autonomous survey vessels used for survey, in addition to also supporting marine and offshore operations which require a long-range MESH radio ranging from 8-12 Kms. The Uni-Mesh can be combined in a fluid self-forming, self-healing mesh containing up to sixteen radios. The Uni-Mesh radios within the mesh exchange data on a single frequency, thereby simplifying frequency management.



UNI-MESH

Survey Equipment

The Uni-Mesh features a 2Watts amplifier to enhance the range and data throughput of up to 8MB/s. The customised addition of various powerful amplifiers can offer more robust data link & increased operational range.

The Uni-Mesh employs the COFDM modulation scheme and therefore offers excellent RF penetration and performance in the presence of multipath.

KEY FEATURES

- COFDM waveform for excellent NLOS & multipath performance
- Compact and Heat Sink enclosure for outdoor use
- Fully integrated & calibrated connectivity solution
- User friendly interface
- Can be configured using ethernet port
- No software installation required
- Extremely stable connection
- Best data throughput in the market
- IP67 Enclosure perfect for marine and subsea environments
- Available in various spectrum bands
- Up to 16 nodes in Mesh





UNI-MESH

Survey Equipment

SPECIFICATIONS

Antennas	2X2 MIMO
Interface Ports	2XN-type, 1X8P Amphenol, 1XD code ethernet
Modulation	MESH, COFDM, NLOS
Carrier Modulation	QPSK/16QAM (adaptive)
Frequency	UHF: 320 - 470MHz, 450 - 600MHz L Band: 1.14 - 1.50GHz S Band: 1.98 - 2.55GHz C Band: 4.40 - 5.00GHz
Max RF Transmit Power	2W (Can be upgraded to 5W)
Bandwidth	2.5, 3.0, 3.5, 5.0, 6.0 MHz
Dimensions (in mm)	136 X 130 X 70 (mm)
Water ingress rating	IP67
Mounting options	4 Screws mount with flange
Weight	2 Kgs/node
Encryptions available	DES as standard, AES128 or AES256 (both optional)
DC Input	12-14V
Power consumed	18W
Output Power	2W; +33 to 0dBm in 0.25dB steps (+/- 1dB)
Temperature Range	-10°C to +50°C
IP Address Allocation	DHCP dynamic IP addressing/static IP

Unique Group



MIDDLE EAST

UAE
Sharjah
Call +971 6 5130333
uaesales@uniquegroup.com

Qatar
Doha
Call +974 44147079
qatarsales@uniquegroup.com

Saudi Arabia
Riyadh + Al Khobar
Call +966 59 701 2365
ksales@uniquegroup.com

ASIA PACIFIC

Singapore
Call +65 6542 1800
fareastsales@uniquegroup.com

India
Navi Mumbai + Vadodara + Vizag
Call +91 22 27619939
indiasales@uniquegroup.com

AUSTRALIA

Perth
Call +61 418 205 212
aussales@uniquegroup.com

Queensland
Call +61 418 205 212
aussales@uniquegroup.com

UK + EUROPE

UK
Cowes, Isle of Wight
Call +44 1983 290 525
seaflexsales@uniquegroup.com

UK
Aberdeen, Scotland
Call +44 1224 820022
abzquotes@uniquegroup.com

Netherlands
Werkendam
Call +31 850 513700
usbv@uniquegroup.com

AFRICAS

South Africa
Cape Town
Call +27 21 835 7900
sasales@uniquegroup.com

Nigeria
Port Harcourt
Call +234 908 5659444
nigeriasales@uniquegroup.com

USA

Central
Houston Texas
Call +1 713 937 6193
usasales@uniquegroup.com

East Coast
Suwanee, Georgia
Call +1 909 626 8316
buoyancyballast@uniquegroup.com

West Coast
Montclair, California
Call +1 909 626 8316
buoyancyballast@uniquegroup.com

