

# U-Link 4G Cellular Router

488-0001





U·Link is Nestlawn's 4G machine communication device. Machines are automatically connected to a central computer via 3G, 3.5G or 4G. All machines can receive GPS corrections from a CORS network.

**Designs and updates can be rapidly downloaded. The locations and status of all machines can be quickly ascertained.**

Key Feature of the U·Link is the second Ethernet port allowing expansion options.

Operation of U·Link is entirely automatic. The device can be set to power up whenever the earth moving equipment is started. Connection to a pre set computer is automatic.

U·Link can be configured to integrate into a range of OEM remote support systems.



**Designed for continuous reliable operation in the harsh environments typically found on hard working mining and earthmoving machines.**

## Applications:

- Remote connectivity to earthmoving equipment
- Transmission of GPS corrections
- Monitoring equipment
- Collection and analysis of data
- Connection to proprietary networks
- Server controlled modem application update support



# 488-0001 U-Link Technical Specifications

## Frequency Bands

### MC3704 version

#### LTE FDD (4G) Bands

- Band 1 (2100 MHz) Telstra 4G
- Band 2 (1900 MHz)
- Band 3 (1800 MHz) Telstra 4G
- Band 4 (1700 MHz)
- Band 5 (850 MHz)
- Band 7 (2600 MHz) Telstra 4G
- Band 8 (900 MHz) Telstra 4G

### EC25 version

#### LTE FDD (4G) Bands

- Band 1 (2100 MHz) Telstra 4G
- Band 2 (1900 MHz)
- Band 3 (1800 MHz) Telstra 4G
- Band 4 (1700 MHz)
- Band 5 (850 MHz)
- Band 7 (2600 MHz) Telstra 4G
- Band 8 (900 MHz) Telstra 4G
- Band 28 (700 MHz) Telstra 4GX

#### LTE TDD Bands:

- Band 40 (2300 MHz)

#### WCDMA (3G) Bands:

- Band 1 (2100 MHz) Telstra 3G
- Band 2 (1900 MHz)
- Band 5 (850 MHz) Telstra 3G
- Band 5 (850 MHz) Telstra 3G

#### GSM (2G) Bands:

- Band 2 (1900 MHz)
- Band 3 (1800 MHz)
- Band 5 (850 MHz)
- Band 8 (900 MHz)

## Peak Data Speed

#### LTE: Category 3:

- 100 Mbps / 50 Mbps (Downlink/Uplink) (20Mhz bandwidth)
- 50 Mbps / 25 Mbps (Downlink/Uplink) (10Mhz bandwidth)

#### HSPA+:

- 42 Mbps downlink (Category 24)
- 5.76 Mbps uplink (Category 6)

#### EDGE

- 236 kbps throughput

## Temperature

- Module Manufacturer's Recommended Operating Temperature: -40oC to +85oC
- Storage Temperature: -40oC to +85oC

## Dimensions

- 143 mm (L) x 107 mm (W) x 34 mm (D)
- Weight: 221 g

## Enclosure

- IP67 rated

## Power

- DC Power (8 - 40V DC)
- Consumption 6W

## Antenna Connectors

- 1 x Ntype Male (3G,4G,4GX)
- 1 x SMA connector for GPS

## Interfaces Connection

- MS3112E12-10P (POE, Digital IO)
- IP67RJ45 10/100/1000 Base-T Ethernet RJ45 ports with Auto MDIX

## LED Indicators

- 8 x tri-colour LEDs - Power, Network, a GPS/customizable LED and 5x Signal Strength indicators
- Easy and clear LED status display for connection status, connected network type, and connection error

## Processor and Storage

- Powerful 720Mhz ARM Cortex A8 processor with 128MByte
- DDR2 RAM
- 256MByte Flash memory storage (~120MB available on board space for user storage)
- MicroSD card slot for additional storage

## Network and Routing

- Static Routing, RIP (v1/v2), Port Forwarding and DMZ
- DHCP Server including address reservation by MAC address
- Custom DNS server definitions

## Administration and Configuration

- Secure web-based user interface (HTTPS) for full device status and configuration
- Password protected configuration file backup and restore for quick device configuration and device cloning
- SSH Command Line Interface for status monitoring, configuration and control
- Ping monitor watchdog (Reset connection on repeated ping failure)
- Diagnostic Log Viewer (remote and local)
- System Status and Security Logs
- NTP Server Support for network time sync of device's system clock
- Supplied with full VPM software for connection to support networks
- GPS Poller 1
- GPS Location, Sim ID Signal Strength
- GPS Poller 2
- GPS firmware serial number board version PC MAC address
- Remote upgrade via central server
- Preconfigured with test certificate
- Dual VPN support
- MCX1 Detector