

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 VRS network such as AllDayRTK.

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 making it the ideal replacement for the MCI4 systems.

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 is preconfigured to integrate into GPS enabled RTK machine control system and integrate into networks such as Tokara®.

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

Application

- 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

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

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, RS232)
- 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 Tokara® software for connection to Tokara® network
- Tokara Configuration bundle unloadable via Web Browser (Certificate and configuration files)
- GPS Poller 1
- GPS Location, Sim ID Signal Strength
- GPS Poller 2
- GPSfirmware,serialnumber,boardversionPCMACAddress
- Remote upgrade via Tokara Server
- Preconfigured with test certificate
- Dual VPN support
- MCX1 Detector

Processor and Storage

- Asbuilt Collector
- Remote Link control
- Package reporting
- Tokara Agent info
- NAT firewall Bypass