The JLink allows the GNSS rover capturing of RTK quality data points where cell phone cover is poor. It provides a robust solution linking the field GNSS equipment to VRS network, where no cell phone cover is available.

JLink enables surveyors to capture data points up to 13 km from where the nearest cell phone coverage is available. JLink contains 1 W UHF (VHF) Radio Transceiver with built-in quad band 2.5G GSM/GPRS/EDGE module. It access VRS network using TCP/IP protocols and high-speed EDGE interface. It takes incoming data from the network, modulates it with GMSK, FSK, PSK or most spectrum efficient QAM modulation and transmits it at RF power output levels from 10 dBm up to 30 dBm operating in UHF frequency band (406 to 470 MHz), or in VHF frequency band (138-174 MHz) optional.

The JLink is also capable of receiving RF signal from remote UHF (VHF) transmitter, and the data could be send over the cellular network using built-in 2.5G GSM/ GPRS/ EDGE module if such operation mode is selected.

The unit’s user settings can be changed through the GREIS interface or through ModemVU. The system built-in diagnostic features provide the information required to monitor and maintain user’s communications link. The output transmit power, receive signal strength (RSSI), antenna/feed line condition, and data decode performance will be transmitted online without application interruption.

Embedded GPS L1 functionality allows using JLink as standalone wireless network RTK field access point. The JLink includes TriPad (two LEDs, ON/OFF and function button), GSM/GPRS/EDGE module, UHF (VHF) modem, Ethernet capability, USB, Bluetooth, and rechargeable batteries.

Two external power inputs secure the power system redundancy and eliminate system failure. The on-board power supply on JLink receiver accepts any voltage from +10 to +30 volts and delivers clean filtered voltage where needed. This eliminates the risk of power contamination (ripples) that can be created when clean power is generated elsewhere and delivered to the board via cables.
Description

Total 216 channels: all-in-view (GPS L1, Galileo E1, GLONASS L1) integrated receiver, rugged aluminum housing complete with TriPad interface.

Tracking Specification

Tracking Channels: GPS L1, Galileo E1, GLONASS L1
Signals Tracked: L1 C/A and P Code & Carrier
Cold Start: < 35 seconds
Warm Start: < 5 seconds
Reacquisition: < 1 second

Radio Specifications

GSM/GPRS Module: Internal GSM/GPRS/EDGE quad-band module, GPRS Class 10
UHF Radio Modem: Internal 1 Watt 406-470 MHz radio transceiver, up to 38.4 kbps
VHF Radio Modem: Internal 1 Watt 138-174 MHz radio transceiver, up to 38.4 kbps

Power Specification

Battery: Two internal Li-Ion batteries (7.4 V, 4.4 Ah each) with internal charger
Operating Time: Up to 15 hours
External power input: 2, 1 - primary, 1 - secondary port(s)
Input Voltage: +10 to +30 volts

I/O

External Power port: 2 ports
Communication Ports: 2x serial (RS232) up to 460.8 kbps
High speed RS422 serial port (up to 460.8 Kbps)
High speed USB 2.0 device port (480 Mbps)
Full-duplex 10BASE-T/100BASE-TX Ethernet port
Bluetooth V2.0+EDR Class 2 supporting SPP Slave and Master Profiles

Environmental Specifications

Enclosure: Aluminum extrusion, waterproof IP 67
Operating Temperature: - 30 °C to + 55 °C (with batteries)/ - 40° C to + 80° C (without batteries)
Storage Temperature: - 20° C to + 45° C (with batteries)/ - 45° C to + 85° C (without batteries)
Humidity: 95% non-condensing
Dimensions: W: 132 mm x H: 61 mm x D: 190 mm
Weight: 1270 g

Compliance

FCC: FCC Part 90
Industry Canada: RSS-210
ETSI: ETSI EN 300 113-2, ETSI EN 301 489-1, ETSI EN 301 489-5, ETSI EN 300 220-1

Specifications are subject to change without notice.