

JAVAD



JLINK LAN

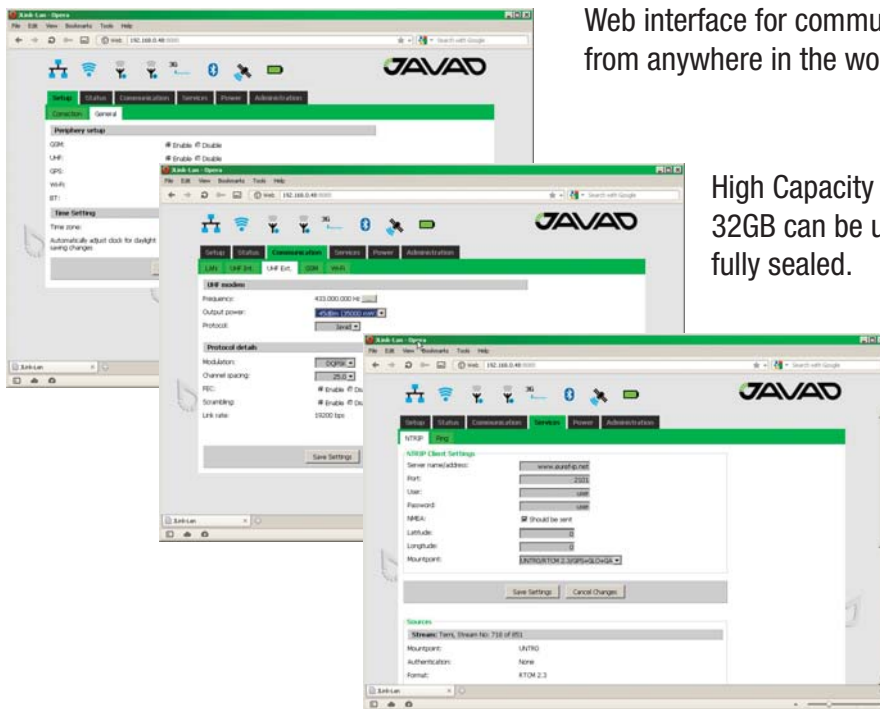
JLink LAN is a mobile multifunctional device designed for communication between GNSS receivers and other devices in the field. JLink LAN allows organizing a local network between different devices via WiFi or Ethernet, connecting to the Internet using LTE / UMTS (WCDMA) / HSDPA / EDGE / GPRS (or 4G/3G/2.5G) channel. This allows transferring the corrections between GNSS base and GNSS rovers via TCP/IP protocol, and also providing remote configuration and monitoring of GNSS receivers.

JLink LAN 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 LAN enables to 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 that 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 10dBm up to 30 dBm operating in UHF frequency band (406 to 470 MHz), or in VHF frequency band (138-174 MHz) optional.

Embedded GPS L1 functionality allows using JLink LAN as standalone wireless network RTK field access point.

JLink LAN can be configured and supported using web-interface through Internet, and this makes the setup mechanism simple and accessible from anywhere in the world.

JLINK LAN



Web interface for communication, monitoring and setup JLink LAN from anywhere in the world.

High Capacity microSD Card (microSDHC) up to 32GB can be used for data storage; user accessible, fully sealed.

WiFi and Bluetooth

IEEE 802.11 b,g,n,d,e,i, compliant

Typical WLAN Transmit Power

20.0 dBm, 11 Mbps, CCK (b).
14.5 dBm, 54 Mbps, OFDM (g).
12.5 dBm, 65 Mbps, OFDM (n).

Bluetooth 2.1+EDR, Power Class 1.5.

Typical WLAN Sensitivity

- 89 dBm, 8% PER, 11 Mbps
- 76 dBm, 10% PER, 54 Mbps
- 73 dBm, 10% PER, 65 Mbps

4G Cellular Module

Packet mode features

LTE data rates (category 3, MIMO)
100 Mbps DL within 20 MHz bandwidth
50 Mbps UL within 20 MHz bandwidth
Circuit-switched data bearers (up to 64 kbps for GSM and UMTS)
Quad-mode UMTS (WCDMA) / HSDPA / EDGE / GPRS operation
HSDPA data rates up to category 20
HSUPA data rates up to category 6
GPRS multislot class 10
EDGE multislot class 12

SIM card slots

Two microSIM cards can be used; user accessible, fully sealed

UHF Radio

Frequency Range

406-470 (EU); 406.1 - 470 MHz (USA); 406-430;450-470 (Canada)

Channel Spacing

25/12.5/6.25 kHz (USA, Canada); 25/20/12.5 kHz (ETSI EN 300 113); 20/12.5 kHz (ETSI EN 300 220)

Carrier Frequency Stability

±1 ppm

Modulation

GMSK/DBPSK/DQPSK/D8PSK/D16QAM

Communication Mode

Half duplex, simplex

Transmitter Output Power

+10... +30 dBm in 1 dB step / 50 Ω

Carrier Frequency Stability

+1 dB / -2 dB

FM Radio Receiver

JLink LAN also includes an FM receiver that can receive corrections through RDS channel. These corrections can be forwarded to the rovers via UHF radio, and using TCP / IP protocol as well.

Frequency Range	76 - 108 MHz
-----------------	--------------

GNSS Receiver

Total 50 channels: all-in-view (GPS L1, Galileo E1)

Tracking Channels	GPS L1, Galileo E1
Signals Tracked	C/A Code
Cold Start	29 seconds
Warm Start	29 seconds
Sensitivity for Reacquisition	- 160dBm
GNSS Antenna	Embedded



I/O

Communication Ports	Two Serial RS232 ports RS422/485 port (optional) Wi-Fi (IEEE 802.11b/g) Bluetooth V2.0+EDR Class 2 supporting SPP Slave and Master Profiles Full-duplex 10BASE-T/100BASE-TX Ethernet port High Speed USB 2.0 Device port CAN 2.0
---------------------	--

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

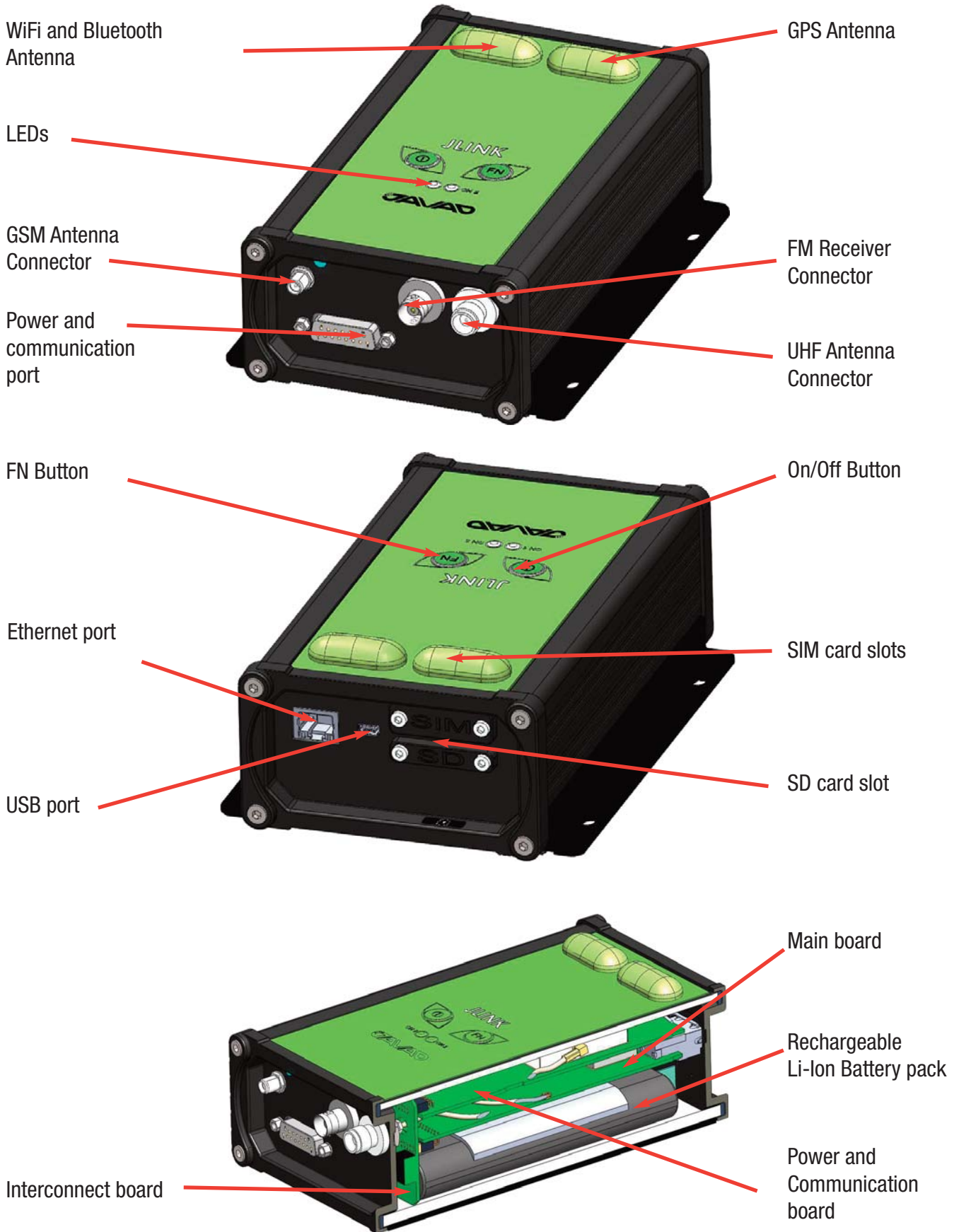
Environmental

Enclosure	Aluminum extrusion, waterproof IP 67
Color	JAVAD GNSS green and black
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	100% condensing
Dimensions	W:178 mm x H:109 mm x D:110 mm
Weight	1250g

Power Management

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

JLINK LAN



JAVAD GNSS
www.javad.com

Rev. 1.0 October 1, 2012

