

# JAVAD

## JLink LTE



JLink LTE is a family of devices designed for organizing a local network between different devices via WiFi, Ethernet, and Bluetooth, connecting to the Internet using 4G cellular digital communication services.

JLink LTE family provides a robust solution linking the field GNSS equipment to RTN, where no cell phone cover is available. JLink LTE devices may contain 1 W either UHF (406 to 470 MHz) or VHF (138-174 MHz), or ISM license free USA band (902-928 MHz) and European CEPT license free (868-870 MHz) radio transceiver. Marine Radiobeacon receiver (283.5 to 325 kHz) can be built-in into JLink LTE device.

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

# JLink LTE



Web interface for communication, monitoring and setup JLink LTE devices from anywhere in the world

## 4G CELLULAR MODULE

4G LTE Mini Card (option 1)	LTE, DC-HSPA+, HSPA+, EDGE, GPRS, GSM and CDMA networks
Technology:	
LTE	Bands: 1 (2100 MHz), 3 (1800MHz), 7 (2600 MHz), 8 (900 MHz), 20 (800 MHz) Data Rates: Category 3 Downlink 100 Mbps (20 MHz bandwidth), 50 Mbps (10 MHz bandwidth) Uplink 50 Mbps (20 MHz bandwidth), 25 Mbps (10 MHz bandwidth)
UMTS (WCDMA), HSDPA, HSUPA, HSPA+,DC-HSPA+	Bands: 1 (2100 MHz), 2 (1900 MHz), 5 (850 MHz), 6 (800 MHz), 8 (900 MHz) Data Rates: HSPA+ rates Downlink up to 42 Mbps (category 24) Uplink up to 5.76 Mbps (category 6)
GSM, GPRS, EDGE	GSM 850 (850 MHz), EGSM 900 (900 MHz), DCS 1800 (1800 MHz), PCS 1900 (1900 MHz) Data Rates: EDGE throughput up to 236 kbps
4G LTE Mini Card (option 2)	LTE, DC-HSPA+, HSPA+, EDGE, GPRS, GSM and CDMA networks
Technology:	
LTE	Bands: 2 (1900 MHz), 4 (AWS) (1700/2100MHz), 5 (850 MHz), 13 (700 MHz), 17 (700 MHz), 25 (1900 MHz G Block) Data Rates: Category 3 Downlink 100 Mbps (20 MHz bandwidth), 50 Mbps (10 MHz bandwidth) Uplink 50 Mbps (20 MHz bandwidth), 25 Mbps (10 MHz bandwidth)
CDMA (EVDO Rel. 0 and Rel.A)	Bands: BC0 (Cellular 800 MHz), BC1 (PCS 1900 MHz), BC10 (Secondary 800 MHz) Data Rates: CDMA IS-856 (1xEV-DO Release A) Up to 3.1 Mbps forward channel Up to 1.8 Mbps reverse channel CDMA IS-2000 Up to 153 kbps, simultaneous forward and reverse channels
UMTS (WCDMA), HSDPA, HSUPA, HSPA+,DC-HSPA+	Bands: 1 (2100 MHz), 2 (1900 MHz), 4 (AWS 1700/2100 MHz), 5 (850 MHz),8 (900 MHz) Data Rates: HSPA+ rates Downlink up to 42 Mbps (category 24) Uplink up to 5.76 Mbps (category 6)
GSM, GPRS, EDGE	GSM 850 (850 MHz), EGSM 900 (900 MHz), DCS 1800 (1800 MHz), PCS 1900 (1900 MHz) Data Rates: EDGE throughput up to 236 kbps

## UHF/VHF RADIO (OPTIONAL)

Frequency Range	406-470 MHz/138-174 MHz
Channel Bandwidth	25/20/12.5/6.25 kHz
Modulation	DBPSK/DQPSK/D8PSK/D16QAM/4FSK/GMSK
Transmitter Output Power	1W (+30 dBm)
Communication Mode	Half duplex, simplex, repeater

## ISM RADIO (OPTIONAL)

Frequency Range	902-928 MHz (USA)/ 915-928 MHz (Australia)/ 868-870 MHz (EU) with 25/12.5 kHz CS
Modulation	GMSK
Data Rate of Radio Interface (USA/Australia)	64000 bps
Data Rate Radio Interface (EU)	9600 bps
Transmitter Output Power	1W (+30 dBm)
Communication Mode	Half duplex, simplex, repeater

## BEACON RECEIVER (OPTIONAL)

Frequency Range	283.5- 325 kHz
User Data Rates	50, 100, 200 bps (manual or Auto selection)
Sensitivity	1.5 mV/m for 6 dB SNR (200 bps)

## GNSS RECEIVER

Tracking Channels	GPS/GLONASS L1
Signals Tracked	C/A Code
Cold / Warm Start	42 / 30 seconds
Sensitivity for Reacquisition	- 161dBm

## COMMUNICATION PORTS

Wi-Fi 2.4 and 5 GHz (IEEE 802.11 a, b, g, n, d,e,i)  
 Full-duplex 10BASE-T/100BASE-TX Ethernet port  
 Bluetooth 4.1 Compliance and CSA2 Support  
 Dual-Mode Bluetooth and Bluetooth LE  
 High Speed USB 2.0 configurable as Device or Host port  
 MicroSD card slot (fully sealed)  
 Serial port configurable as RS232/RS422/RS485

## ENVIRONMENTAL

Enclosure	aluminum, IP67
Color	Two-tone Gray / Green
Operating Temperature	-40° C to +70° C *
Storage Temperature	-40° C to +85° C **
Humidity	100% condensing
Weight	468 g / 970 g
Power Supply Voltage	+5.5...36V without battery charging, 4Amax; +12...34V when the battery is charged, 3.6Amax
Battery (optional)	One embedded, 7.2V, 5850 mAh

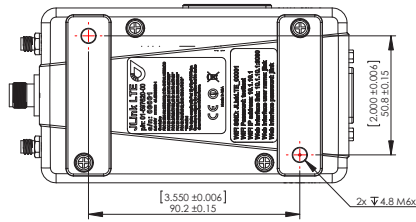
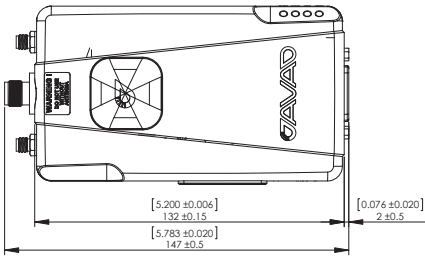
\* The operating temperature of Li-Ion batteries is -20 ° C to +45° C

\*\* The storage temperature range of Li-Ion batteries is -20 ° C to +60° C

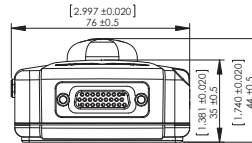
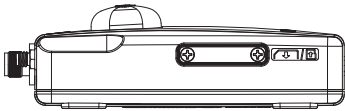
## PINOUT OF JLINK LTE POWER AND COMMUNICATION PORT

Pin #	Signal Name	I/O	Description	Pin #	Signal Name	I/O	Description
1	TX+/RTS_OUT	O	Transmit Data positive line (RS-422) / Request to Send (RS-232)	14	USB0_VBUS	PWR	Power line (USB)
2	RX+/CTS_IN	I	Receive Data positive line (RS-422) / Clear to Send (RS-232)	15	USB0_ID	I	USB0 ID line
3	DTR_OUT	O	Data Terminal Ready (RS-232)	16	ETD-	O	Transmit Data negative line (LAN)
4	USB0_DP	I/O	Data Positive line (USB)	17	ERD-	I	Receive Data negative line (LAN)
5	USB0_DM	I/O	Data Negative line (USB)	18	PWR_IN	PWR	+5.5 to +36 VDC Power Input
6	ELED+	O	LED line (LAN)	19	GND	PWR	Power Ground
7	ETD+	O	Transmit Data positive line (LAN)	20	GND	PWR	Power Ground
8	ERD+	I	Receive Data positive line (LAN)	21	GND	PWR	Power Ground
9	PWR_IN	PWR	+5.5 to +36 VDC Power Input	22	RESERVE	-	Not used. Reserve
10	TX-/TX_OUT	O	Transmit Data negative line (RS-422) / Transmit Data (RS-232)	23	RESERVE	-	Not used. Reserve
11	RX-/RX_IN	I	Receive Data negative line (RS-422) / Receive Data (RS-232)	24	POWER_OUT	O	Power for FAN, +12V@0.3A max
12	DSR_IN	I	Data Set Ready (RS-232)	25	RESERVE	-	Not used. Reserve
13	DCD_OUT	O	Data Carrier Detect (RS-232)	26	PWR_IN	PWR	+5.5 to +36 VDC Power Input

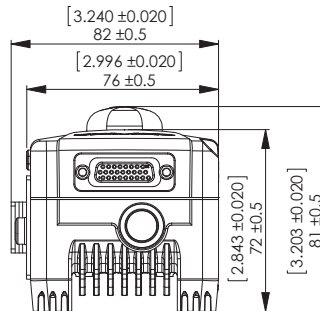
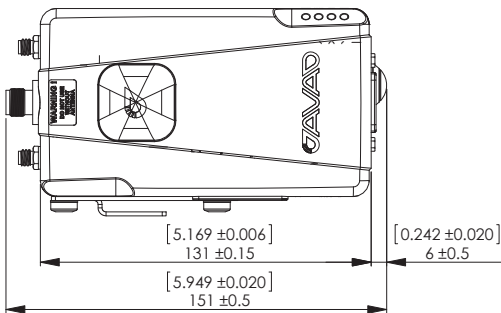
# JLink LTE



Variant 1 and 3



all dimensions are in mm



Variant 2 and 4

Variant 1: UHF/VHF/ISM Transceiver / Beacon receiver, cellular module, GPS receiver, Bluetooth, WiFi, Ethernet, USB and Serial port.

Variant 2: Variant 1 with battery.

Variant 3: Cellular module, GPS receiver, Bluetooth, WiFi, Ethernet, USB and Serial port.

Variant 4: Variant 3 with battery.



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Illustrations, descriptions and technical specifications are not binding and may change.

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