



HARDWARE PRELIMINARY SPECIFICATION

Processor	Elkhart Lake / x6000E series / Intel® Celeron® Processor J6413
Onboard storage	256 GB maximum
Onboard RAM	16 GB maximum
Expandable storage	M.2 NVMe SSD 2280
Dimensions w x d x h	284 mm x 192 mm x 42.6 mm
Weight	1300 g
Operating temperature	-25°C to 60°C
Humidity	0 % to 95 %
Power supply	Dual 3-pin terminal block (+, -, ignition), +12~32 VDC ATX mode support ignition delay on/off control
Integrated cellular	Up to 3 x 5G
Modem model	Telit FN990B40
SIM card slot	3 x dual nano SIM
eSIM support	eUICC with 4FF
M.2 type	3052-S3-B
Ethernet (WAN and/or LAN)	1 x 10 Gbps RJ45, 4 x 2.5 Gbps RJ45, 1 x 2.5 Gbps M12
Wi-Fi (WAN and/or LAN)	2T2R 2.4 GHz + 3T3R 5/6 GHz (BW160), OFDMA, Zero DFS, ESR, MU-MIMO, 1024QAM, HE160, DBDC
Security support	WFA, WPA/WPA2/WPA3 personal, WPS 2.0
QoS support	WFA WMM, WMM PS
PCIe	Fully compliant to PCIe v2.1
Bandwidth support	20/40 MHz -> 2.4 GHz 20/40/80/160 MHz -> 5/6 GHz
USB connection	1 x USB-C 3.2, 2 x USB-A 2.x
Bluetooth	5.0, Realtek RTL8761B, USB
Connectors	HDMI screen out, programmable GPIOs, CAN FD, RS232/RS485

GNSS	Dual-band L1 + L5, multi-constellation, SBAS, RTK and dead reckoning 1 m CEP autonomous, centimetre-class with RTK corrections
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SUPPORTED BANDS

5G	n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29(SDL)/n30/n38/n40/n41/n48/n53/n66/n67(SDL)/n70/n71/n75(SDL)/n76(SDL)/n77/n78/n79/n91/n92/n93/n94
4G	B1/B2/(B25)/B3/B4(B66)/B26(B5,B18,B19)/B7/B8/B12(B17)/B13/B14/B20/B28/B29(SDL)/B30/B32(SDL)/B34/B38/B39/B40/B41/B42/B43/B46(SDL)/B48/B67(SDL)/B68/B70/B71
3G	B1/B2/B4/B5/B8
1Tx / 4Rx (4x4 DL MIMO)	4 x 4 Rx: All 4G and 5G MHB and UHB bands 2 x 2 Rx: LB and B46
2Tx (2x2 UL MIMO)/4Rx (4x4 DL MIMO)	5G: n38/n40/n41/n77/n78/n79 4G: [TBD]
Tx power class (HPUE)	PC2: n(41, 77, 78, 79) PC1.5: n(41, 77, 78, 79) UL MIMO
1Tx / 1Rx (2nd Rx diversity)	4G: All operating bands 3G: All operating bands

PERFORMANCE

5G	5.1 Gbps + 5.1 Gbps, depending on model
5G maximum DL/UL speed per modem	FR1 (Sub-6 GHz), Rel 17 NSA up to 4.9 Gbps on DL, 0.55 Gbps on UL, SA up to 4.1 Gbps on DL, 0.90 Gbps on UL
LTE category	CAT 20 up to 2.0 Gbps on DL, CAT 18 up to 210 Mbps on UL, 3G Rel 17 HSPA + Rel 18 up to 42/11 Mbps in DL/UL
LTE maximum DL/UL speed	2 Gbps/210 Mbps per modem
Wi-Fi protocol	IEEE 802.11 a/b/g/n/ac/ax
Wi-Fi frequency	2.4 GHz / 5 GHz / 6 GHz
IP rating	IP41
PoE	802.3at IN/OUT WAN/LAN configurable (1 x IN, 4 x OUT)

ANTENNAS

LTE antenna	12 x SMA female, depending on model
Wi-Fi antenna	3 x RP-SMA female
GNSS antenna	1 x SMA female
BLE antenna	1 x RP-SMA female

GNSS SUPPORT

Receiver type	Dual-band (L1 + L5), concurrent multi-constellation
GPS	L1 C/A, L5
GLONASS	L1
Galileo	E1, E5a
BDS	B1I, B2a
QZSS	L1 C/A, L5
NavIC	L5
SBAS	L1: EGNOS, WAAS, MSAS, GAGAN
Augmentation	RTK rover, RTCM 10403.3 (MSM1/4/5/7), NTRIP
Base station mode	Survey-in, RTCM MSM4 + 1005 output
Dead reckoning	Integrated 6-axis IMU, UDR and ADR with automatic switching
Horizontal accuracy	1 m CEP autonomous, < 10 cm with RTK corrections
RTK convergence	10 s
Update rate	Up to 10 Hz, 1 Hz default
Sensitivity	-165 dBm tracking, -147 dBm acquisition
Timing output	1PPS, < 100 ns
Integrity monitoring	Protection level and estimated position error output
Interference	Jamming detection
Additional features	Geofence, odometer
Antenna	Active or passive dual-band L1 + L5, 1 x SMA female
Interface	NMEA 0183, RTCM 3.3

Powered by CelerwayOS, our portfolio of solutions is ideal for large deployments in a multitude of use cases.

celerwayOS

Our lightweight and robust router software is built on open source and designed with mobile in mind. It continuously monitors traffic and network health against dozens of parameters and performs intelligent routing across multiple simultaneous WANs.

phantom

A key component of CelerwayOS that enables:

Dynamic Adaptive VPN load balancing

Seamless switching between multiple networks

Uninterrupted high-speed VPN and site-to-site communications

Ultra-flexible network topologies

On-premise or cloud-based operation on virtual machines or x86 hardware

nimbus

Our remote administration system for deploying and managing devices running CelerwayOS:

User-friendly dashboard and comprehensive live reporting

Powerful features for mass deployment

Secure access with 2-factor authentication

Flexible notification and alerts system

Timely and worry-free firmware updates

At Celerway, we're on a mission to keep business ahead of the mobile curve.

Founded in Oslo, Norway, Celerway masters the complexity at the Edge, empowering our partners and customers to create and deliver the right Edge products and services at the right time, with the best available connectivity, security, extensibility, and manageability.

The Celerway mobile-first platform enables customers to harness the power of multiple simultaneous wireless and wired connections to take their networks where they want them to be, thus expanding the reach of their SD-WAN or edge and branch networking solutions.

Celerway takes pride in the quality and security of its offerings. The company has been awarded 4 certifications by the International Organization for Standardization: ISO 9001, ISO 14001, ISO 45001, and ISO 27001, with more pending.

