

Carlson

Be outstanding in your field!

The BRx6 is Carlson's all-new multi-GNSS, multi-frequency smart antenna. The BRx6 provides robust performance and high precision in a compact and rugged package. With multiple wireless communication ports and an open GNSS interface, the BRx6 can be used as a precise base station or as a lightweight and easy-to-use rover.

World-Class Athena™ RTK technology

The BRx6 receiver is powered by a state-of-the-art Athena RTK (Real Time Kinematic) engine. With multiple connectivity options, the BRx6 allows for RTK corrections to be received over radio, GSM modem, Wi-Fi, Bluetooth, or serial connection.

Integrated Atlas™ L-band Receiver

The BRx6 receiver also enables users to work with the subscription-based Atlas corrections service, this industry leading global correction service provided over L-band communication satellites and the Internet. With this service, BRx6 users are provided with sub-decimeter positioning performance anywhere on earth. The Atlas L-Band receiver is standard on all Carlson BRx6 receivers.

Carlson Listen-Listen

Listen-Listen is a new way of providing GNSS corrections between a mobile base station and multiple rovers (without fixed IP). Carlson listen-Listen is a subscription service using worldwide servers to re-transmit real-time GNSS corrections over the Internet. Using GSM communications or other external Internet connection, the Carlson Listen-Listen methodology is simple to configure and use, relatively low cost and completely controlled by the user.

Tilt and Direction Sensors

The Carlson BRx6 is equipped with sensors to enable position measurement with the pole tilted up to 30 degrees from vertical. Using the sensors in combination with Carlson SurvCE or SurvPC software, the user can instantly record a precise point position, even when the pole is far from vertical.

Post-Processing

Carlson BRx6 raw GNSS data can easily be downloaded to any device via its inbuilt web interface. Raw GNSS data can be post-processed using Carlson SurveyGNSS software. The raw data can be from static, stop and go or VRS observations. Network adjustments as well as field-to-finish codes can be processed. The resultant information can be easily returned to CAD and reports of all types can be generated.

Find Out More NOW!

For more info or to locate a dealer near you

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BRx6

GNSS Receiver



Carlson APAC | Brisbane | Australia

Carlson BRx6 GNSS Receiver - Be outstanding in your field!

GPS Receiver

Receiver Type: Multi Frequency GNSS
Positioning Modes: RTK, L-band, DGNSS, SBAS, Autonomous
Channels: 372
RTK Formats: RTCM3, ROX
L-Band Formats: Atlas H100, Atlas H30, Atlas H10
Update Rate / Recording Interval: Selectable from 1, 2, 4, 5, 10 Hz (20 Hz available)

Performance (RMS)

	Horizontal	Vertical
RTK:	8 mm + 1 ppm	15 mm + 1 ppm
Static Performance (long occupation):	3 mm + 0.1 ppm	3.5 mm + 0.4 ppm
Static Performance (rapid occupation):	3 mm + 0.5 ppm	5 mm + 0.5 ppm
L-band Performance:	0.08 m	0.16 m
SBAS (WAAS):	0.3 m	0.6 m
Autonomous, no SA:²	1.2 m	2.4 m

Satellite Tracking

GPS: L1C/A, L1P, L2P, L2C
GLONASS: L1C/A, L2C/A
BeiDou: B1, B2, B3
QZSS: Firmware Upgrade option
Galileo: Firmware Upgrade option
SBAS: MSAS, WAAS, EGNOS, GAGAN

Communication

Connectors I/O:

5-pin Lemo connector for external power supply and external radio devices
 7-pin Lemo connector for USB OTG connection and a serial port interface
 1 TNC antenna connector for internal radio

WebUI: To upgrade the software, manage the status and settings, data download, via smart phone, tablet or other electronic device

TTS: Smart voice broadcast system. "Speaking" receiver

Reference Outputs: RTCM2.1, RTCM2.3, RTCM3.0, RTCM3.1, RTCM3.2 including MSM, NMEA

Radio

Frequency Range: 410 - 470 MHz
Channel Spacing: 12.5 KHz / 25 KHz
Emitting Power: 0.5 / 1 W

Wireless Module

Wi-Fi: Integrated module with internal Wi-Fi antenna
Bluetooth: Bluetooth 2.1 + EDR Integrated
Bluetooth (BT) communication module with internal BT antenna

Cellular

Type: UMTS/HSPA+/GSM/GPRS/EDGE
Function: Data
Supported Frequencies: GSM/GPRS/EDGE (850, 900, 1800, and 1900 MHz)
HSDPA: (850/800, 900, 1800, and 1900 MHz)

Power

Battery: Rechargeable 11.1 V -37.74 Wh intelligent lithium battery
Battery life: 5 hours with one battery and UHF radio in Rx mode
Voltage: 9 to 22V DC external power input with over-voltage protection (5-pin Lemo)
Charge Time: Typically 7 hours

Memory

SIM card: User accessible SIM card slot
Memory: Internal 4GB, accessible through USB and Wi-Fi.
SD card: External Micro SD card slot, supports up to 64GB.

Environmental

Operating Temperature: -30°C to 60°C (-22°F to 140°F)
Storage Temperature: -40°C to 80°C (-40°F to 176°F)
Waterproof/Dustproof: IP67. Protected from temporary immersion to a depth of 1 meter

Shock Resistance:

MIL-STD-810G, method 516.6

Designed to survive a 2 m pole drop on concrete floor with no damage; designed to survive a 1 m free drop on hardwood floor with no damage

Vibration: MIL-STD-810G, method 514.6E-I
Humidity: Up to 100%
Inflammability: UL recognized, 94HB Flame
Class Rating (3): 1.49 mm
Chemical Resistance: Cleaning agents, soapy water, industrial alcohol, water vapor, solar radiation (UV)

Mechanical

Size: 14.1 D x 14.0 H (cm), 5.5 D x 5.5 H (in),
Weight: <1.38 kgs (<3.05 lbs)
Mounting: 5/8"x11, 55° thread angle, stainless steel insert
Phase center offset: GPS L1 and L2 offset below 2.5 mm

