



BC4100 UWB Reader

The BlueCats 4100 Ultra-Wideband (UWB) Reader receives 7.3 GHz signals emitted by BC2111 and BC2112 Tags.

After receiving the signal, the BC4100 measures the time of arrival (ToA) and sends it to the Synchronization Distribution Panel (SDP). A tag's precise location is calculated from the combined difference in time of arrivals (TDoA) from multiple readers.

The BC4100 acts only as a receiver and does not transmit any signal. It uses directional antennas to cover specific areas of your site or omnidirectional antennas for more general coverage.



Benefits



SCALABLE

- Reduce cabling homeruns with chains of readers on one SDP
- One Ethernet cable provides power and data sync



EXTREME ACCURACY

- Hyper-precise timing calculations provide best-in-class, centimeter-level tracking



POWERFUL

- Process thousands of UWB tag signals in real time



MANAGEABLE

- Device diagnostics (performance, status, and more)
- Weather-resistant housing for indoor and outdoor use

For What

- Real-time, 2D tracking

Works Great With

- Loop Local
- BC2111 (Vertical)
- BC2111 (Asset)
- BC2112

For Who

- Warehousing
- Manufacturing
- Supply chain logistics
- Healthcare
- Hospitality
- Retail
- Sports



Specifications

MECHANICAL

Dimensions	254 mm (H) × 142 mm (W) × 89 mm (D)
Weight	1450 g
Mounting options	Wall, Truss, Pole, Ceiling/Roof, Rail
Enclosure material	Polycarbonate

POWER

Power source	Proprietary PoE (SDP)
Power	4.5 W
Input voltage	35–52 VDC Nominal
Output voltage	35–52 VDC

ENVIRONMENTAL

Operating temperature	–20°C to +55°C
Ingress protection	IP65

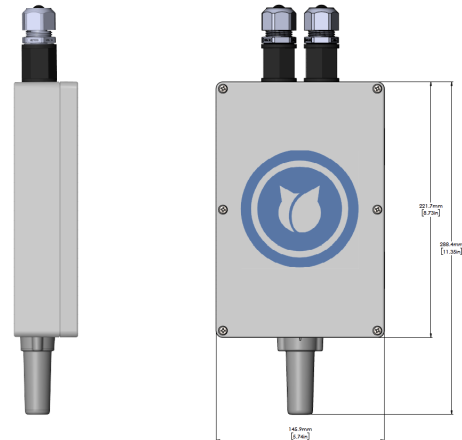
ETHERNET

PoE	Proprietary
PoE pass-through	Proprietary
Data rate	10/100 Mbps

UWB

Chipset	Proprietary
Frequency	6.7 GHz to 7.7 GHz
Antenna	Omnidirectional or directional varieties available
Protocols	Aloha TDoA

Dimension Drawings



CERTIFICATIONS

FCC	Yes
IC	No
CE	Yes
RCM	No

DEVICE

Ethernet	1× 10.100 M PoE, 1× PoE pass-through
Protocols	UDP/IP

Huntsville, Alabama
6767 Old Madison Pike NW, Suite 300
Huntsville, AL 35806
+256 217 4072

Austin, Texas
2404 Rutland Drive, Suite 175
Austin, TX 78758
+1 256 217 4072

Sydney Australia
Ground Floor, 1 Northcliff St
Milsons Point NSW 2061, Australia
+61 2 8912 7700



Get in touch
sales@bluecats.com
bluecats.com