

Ultra Wide Band ANCHOR

WA01

Compact UWB IP67 anchor

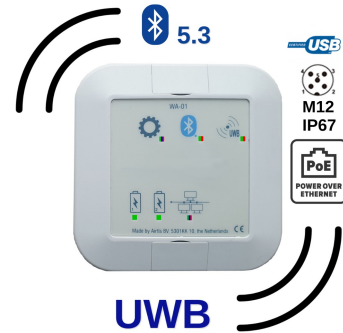
Key items:

- Person and object tracking using long range UWB
- Operates outside congested wifi bands
- Qorvo DW1000 UWB Radio, 3-7GHz, IEEE 802.15.4a
- 8dBm Bluetooth 5.3
- Firmware upgrade over the air (AES security, unique ID)
- 900mAh LiPo battery (optional)

Indoor localisation < 10cm accuracy¹

Typical indoor range in buildings for UWB equipment is 30m at 6.8Mbps passing through some walls. For open halls or outdoor range is up to 300m.

Special electronics to increase sensitivity and selectivity of the radio transceiver enable long range tracking. Radio signals travel through walls enabling a true 3D tracking environment. The ultrawideband radio guarantees a reliable connection as a data backhaul for bi-directional secured communication. UWB operates outside the WiFi bands using worldwide allowed unoccupied frequencies.



Secure access & control



UWB indoor tracking



Energy efficient: 2 UWB modes



Network to all IOT devices



3D visualisation app



Infiniscale[®], wireless scaleable

Connector 1 : M12 5 pin
Power input

USB (via M12 connector)
M12 connector 4.5 to 28VDC
PoE (optional)
Internal battery (optional)

Optional

- Connector 2 : Ethernet 10/100
- Linux board : Quad core A7 1.2GHz
- Battery : 900mAh

| | |
|-------------------------|--------------------------------|
| Dimensions | 100 x 100 x 27 mm |
| Operational temperature | -15 to +70 °C |
| Weight | 200g |
| Power consumption | 0.5Watt typical |
| Radio | UWB 3-7GHz Bluetooth 2.4GHz |


Factsheet

V 1.0

mail info@airtls.com

¹: Accuracy range from sub cm accurate in line of sight condition in calibrated environment to few decimeter accuracy in standard commercial building environment with brick or concrete walls

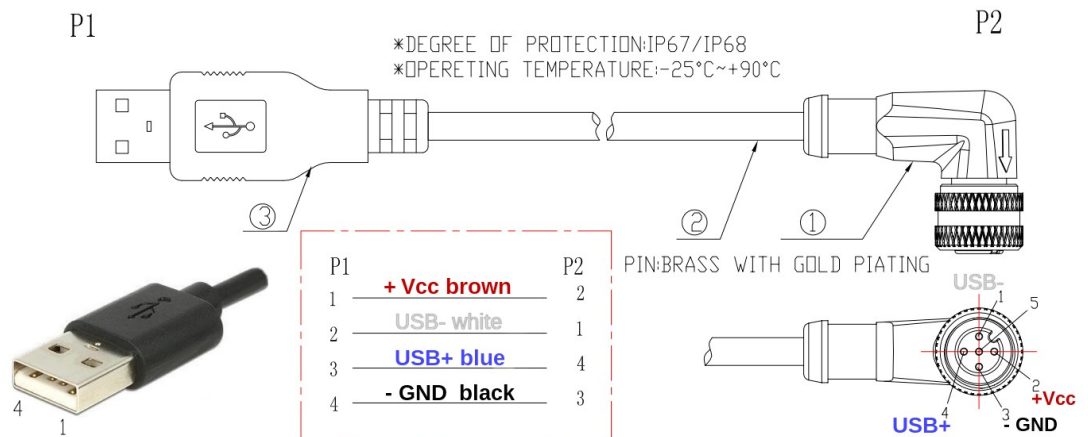
WA01 LEDS

| | LED | Blinking |
|----------------|-----------|--|
| SYSTEM | RGB | Blue: system init |
| BLUETOOTH | RED/GREEN | Red: bluetooth advertise Green: connected |
| UWB | RED/GREEN | Red: TX, Green: RX |
| | |  |
| BATTERY 1 | GREEN | Green: charging |
| BATTERY 2 | GREEN | Green: charging |
| NETWORK 10/100 | RED/GREEN | Red: TX, Green: RX |

USB, Power cable

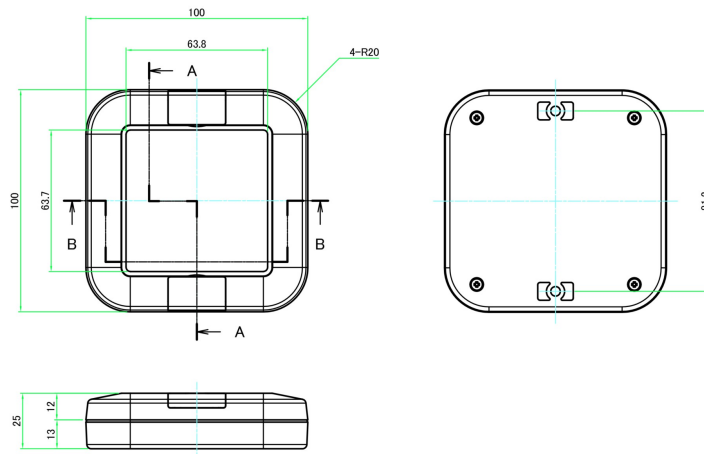
M12<>M12 length 4, 8, 12, 20m
M12 splitter to M12-male, M12-female

USB<>M12 length 1.8m
USB 5V. Input voltage range WA01 M12 connector (P2): 4.5 to 28VDC
P1: USB-A
P2: M12 5pin IP67



For industrial and building automation a star topology of 24VDC power supply is recommended using the M12 ready made power supply cables. For data offloading a M12 to USB cable can be used.

DIMENSIONS



OPTIONAL: 3/8 UNC Mounting bracket



I-beam Mounting flange (100 to 250mm wide flanges)

