



Highlights

- LTE-M1 / NB-IoT resilient communications
- Certified for use in ATEX & UKEX Zone 0 hazardous areas
- Certified for use with hydrogen
- IP68 rated for below ground installation
- External battery pack with 5 years typical life
- Simple installation and low maintenance



The Uconnect IoT device is a UtonomyOne component.

Uconnect provides data logging and secure communications between Ucontrol equipment and the centralised Ucloud data management platform.

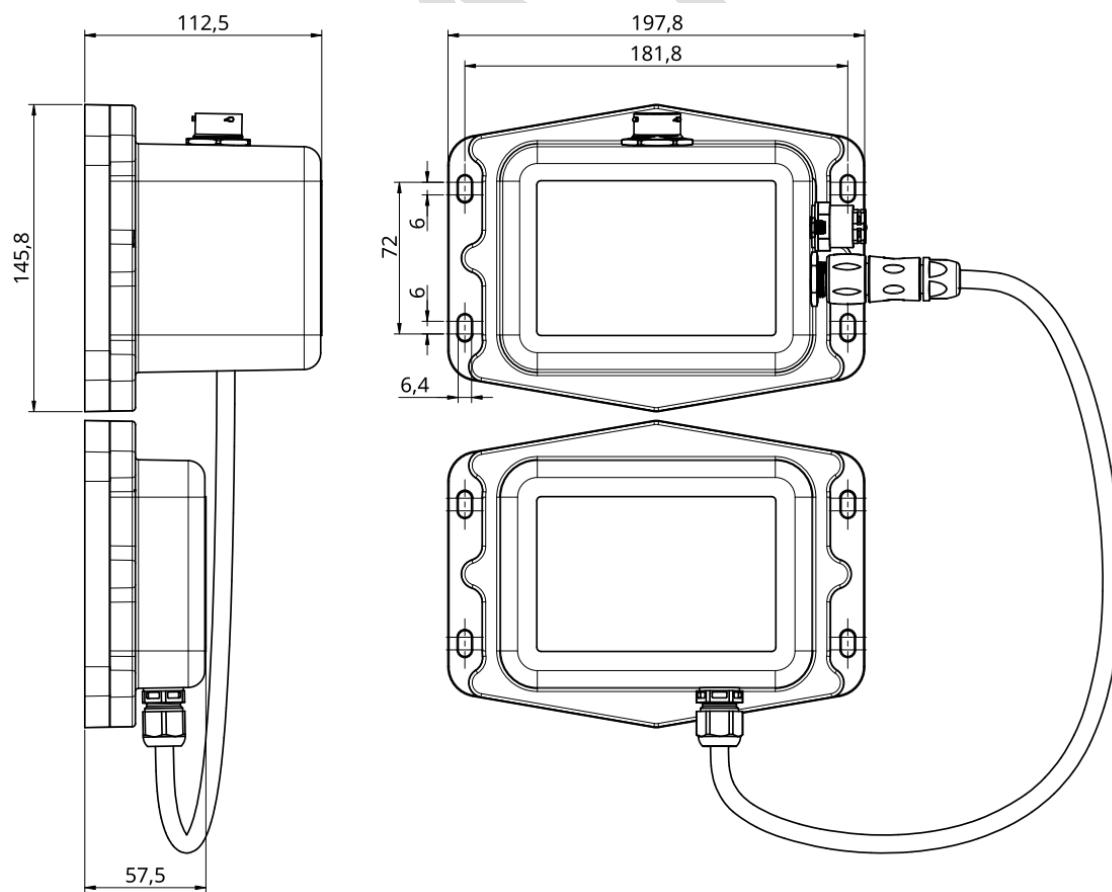
The Uconnect IoT device supports wireless cellular IoT (internet of things) connectivity using LTE-M1 and NB-IoT technologies across multiple frequency bands for resilient communications.

The Uconnect IoT device and the associated external battery pack are intrinsically safe, with ATEX & UKEX Zone 0 certification, for installation in hazardous gas environments, including hydrogen.

The device and battery pack enclosures are rated for submerged use at a depth of 1.5m for a duration of 30 days to allow installation into below ground environments.

Used in conjunction with Ucontrol products and the wider UtonomyOne system, the Uconnect IoT device facilitates standalone set-point scheduling, remote pressure control, and autonomous set-point optimisation based on machine-learning-based predictive demand models.

Dimensions (mm)





Uconnect IoT

Technical Specifications

Supply		
Approved Battery Packs		0800-000123-4T — IoT Battery Pack (Tadiran cells)
Technology		Lithium Thionyl Chloride (Li-SOCl2)
Battery Life		5 years based on typical operating environment and usage profile
Communications		
Supported Cellular Types	LTE-M1	Cat-M1: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B28, B66
	NB-IoT	Cat-NB1/NB2: B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B66
Environmental		
Operating Temperature		-20 °C ≤ Ta ≤ 58 °C
Storage Temperature		-20 °C ≤ Ta ≤ 60 °C
Relative Humidity		10 ... 90% RH (non-condensing)
Ingress Protection		IP68 (1.5 meters depth, 30 days duration) as per BS EN IEC 60529
Mechanical		
Weight		1.0 kg (0800-000121-XX – Umonitor IoT) 1.1 kg (0800-000123-4T – IoT Battery Pack)
Construction		Enclosure: ABS, Polycarbonate
Pressure Connector(s)		Parker Rectus Series 21KA
Antenna Connector		SMA female
Approvals & Standards		
ATEX & UKEX		II 1 G, Ex ia IIC T4 Ga, -20 °C ≤ Ta ≤ 58 °C
EMC Emissions		BS EN IEC 55011
EMC Immunity Radio Equipment		BS EN IEC 61326-1, EN ETSI 301 489-1, EN ETSI 301 489-52
Low Voltage		BS EN IEC 62368-1
RoHS		BS EN IEC 63000, Compliant with exemptions 6 b, 6 c, 7 a, 7 c (l)

Ordering Information

Part Number	Description
0800-000121-XX	Uconnect IoT
0800-000123-4T	IoT Battery Pack (Tadiran cells)

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