



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



Uconnect IoT

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.

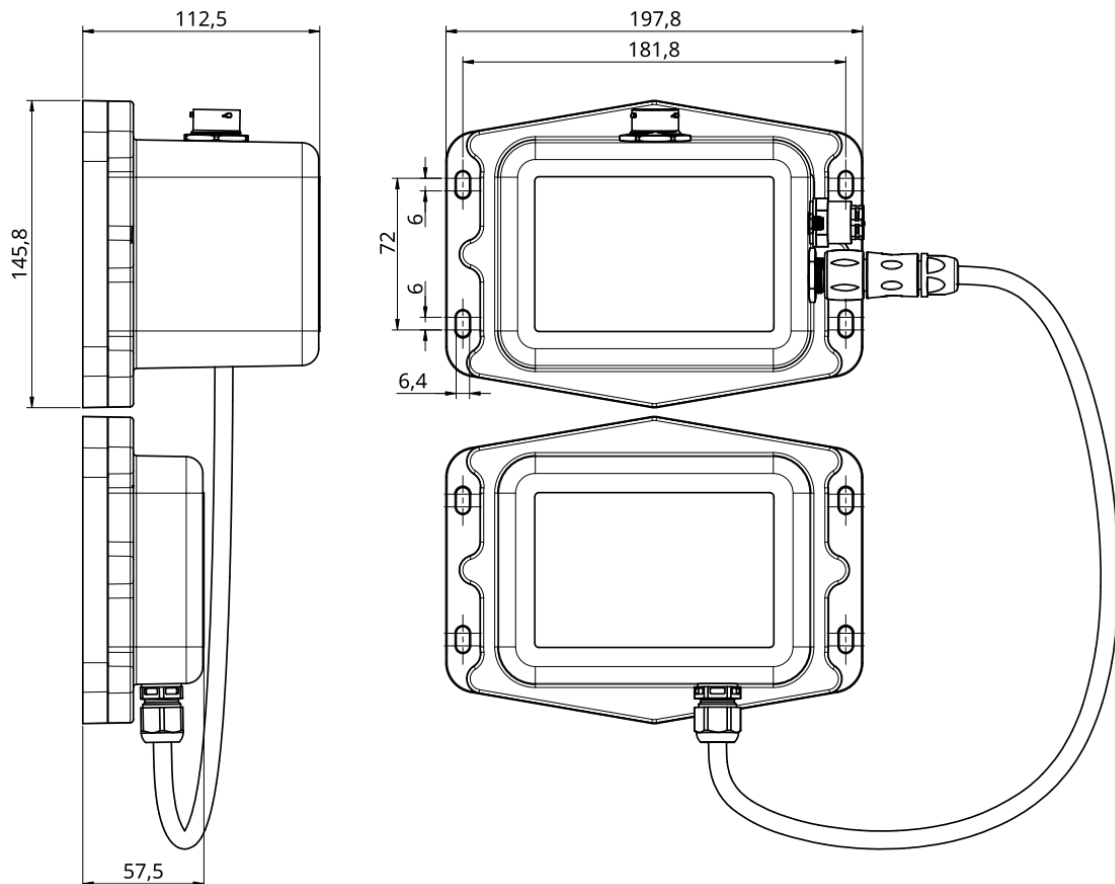
The Uconnect IoT device supports wireless cellular IoT (internet of things) connectivity using LTE-M1 and NB-IoT technologies across multiple frequency bands for resilient communications.

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-SOCl ₂)	
Battery Life	5 years based on typical operating environment and usage profile	
Communications		
		Frequency Bands
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 (I)	

Ordering Information

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

