

HELIX OUTDOOR HUB TECHNICAL DATASHEET



OVERVIEW

The Helix Outdoor Hub is a state-of-the-art remote monitoring solution designed to optimise concrete management and site operations. Utilising advanced LoRaWAN wireless technology, it seamlessly transfers real-time data from over 100 Helix Nodes to the cloud, ensuring continuous visibility into concrete conditions and site performance. Built to withstand harsh outdoor environments, the Helix Hub features an IP65 dust and water-resistant enclosure and operates in a wide temperature range, making it suitable for global deployment. With easy installation options and integrated connectivity indicators, the Helix Hub offers a reliable, scalable solution for construction sites looking to enhance productivity, safety, and environmental compliance.

FEATURES

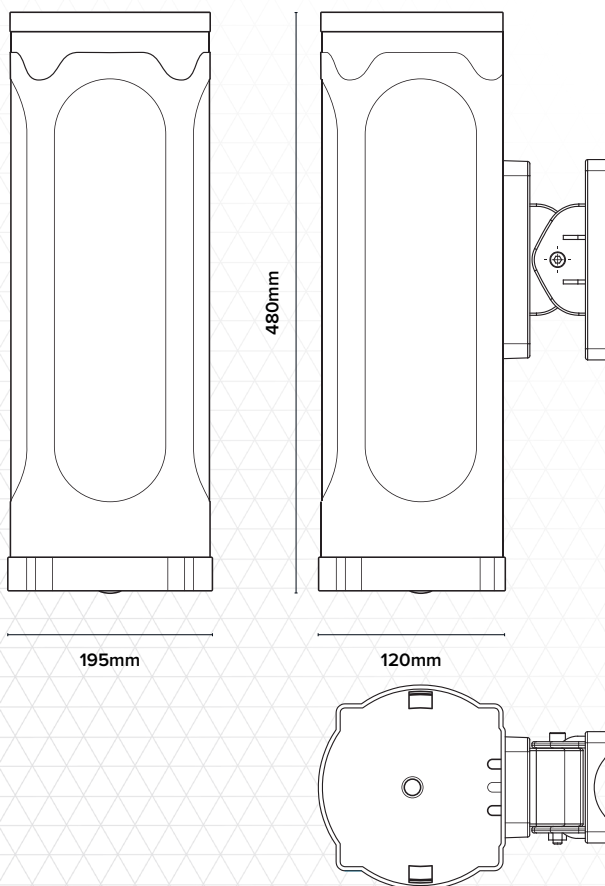
- Remote monitoring system that automatically pushes site data to the cloud.
- Advanced, wireless data on the LoRaWAN network using either Cellular or LAN connectivity.
- Transfers real-time, continuous data from over 100 Helix Nodes.
- Dust and water resistant, IP65 enclosure.
- Extended temperature range for global use.
- Integrated LED indicator provides real-time feedback on internet connection strength.
- Mounting options are provided in the box for quick and secure installation of the Helix Hub to scaffolding or poles.

TECHNICAL SPECIFICATIONS

Description	Outdoor LoRaWAN Hub
Device Dimensions (LxWxH)	480 x 195 x 120mm
Weight	1.4kg
IP Rating	IP66
Operational Temperature Range	-20 to 85°C
Enclosure Materials	ASA
Bluetooth version	v5.1
Power Input	12 – 24V DC, 2A
LoRaWAN Range	Up to 1.5 miles (2.4km) in open space
Maximum Recommended Shelf Life	2 years
USB Ports	1
Connector	RP-SMA for LoRa Antenna
Applicable Products	ConcreteDNA

RECOMMENDED SETUP PER USE CASE

- Use in conjunction with Helix Nodes.
- Install the Helix Hub outdoors and as high as possible.
- Ensure minimal interference between the Hub and the Node for best performance (avoid any metal obstructions).
- Do not install the Helix Hub in a metal site office or storage container.
- Setup configurations may vary based on your environment. Please refer to the customer manuals provided at the point of purchase or contact a sales representative for additional details.



SAFETY INSTRUCTIONS

WARNINGS

- This device is intended for use as a wireless outdoor hub and not for use in domestic or commercial settings.

INSTRUCTIONS FOR SAFE USE

- Install the device away from areas which may be saw cut, cored or drilled through or hit with a concrete pump.
- Do not attempt to open or modify the device, any modifications may impair the functionality and safety of the device.

REGULATORY INFORMATION

Device certified for FCC, ISED, CE, UKCA, RCM, ACMA, NZRSM, IMDA, OFCA and WPC ETA.

Converge Helix Hub is not recyclable and should not be disposed of in general household or commercial waste or in landfill.

