VEMAVENTURI
AB PICBKM01 ISC Hub and ISC Node

Vemaventuri AB PICBKM01 ISC Hub and ISC Node Instructions

Contents

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Product overview

Overview

The image depicts the ISC Hub attached to the ISC Node.

TRADE NAME
InSite Construction Hub
INTERNAL DEFINITION
CARRION HV01/MKF-12
DESCRIPTION
The second generation Main Unit for the InSite Construction Data Acquisition System.

Main Unit circuit board Hardware Version 01.
Enclosure revision F – Circuit Board Revision 12.

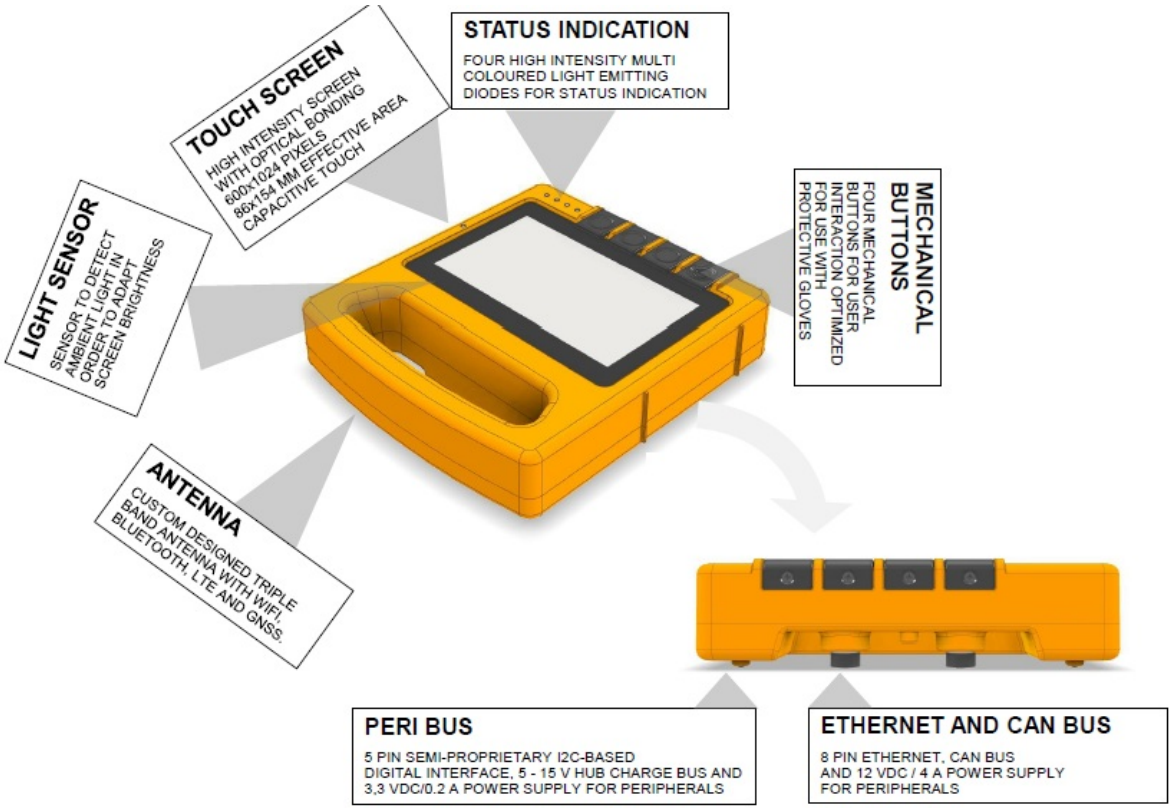
TRADE NAME
InSite Construction Node
INTERNAL DEFINITION
HV02/MK08

PABM HV02/MK08 PABS HV02/MK06
DESCRIPTION
Analogue Input Module for the InSite Construction Data Acquisition System.

Analogue Input Module Main circuit board Hardware Version 02.
Enclosure revision F – Circuit Board Revision 08.

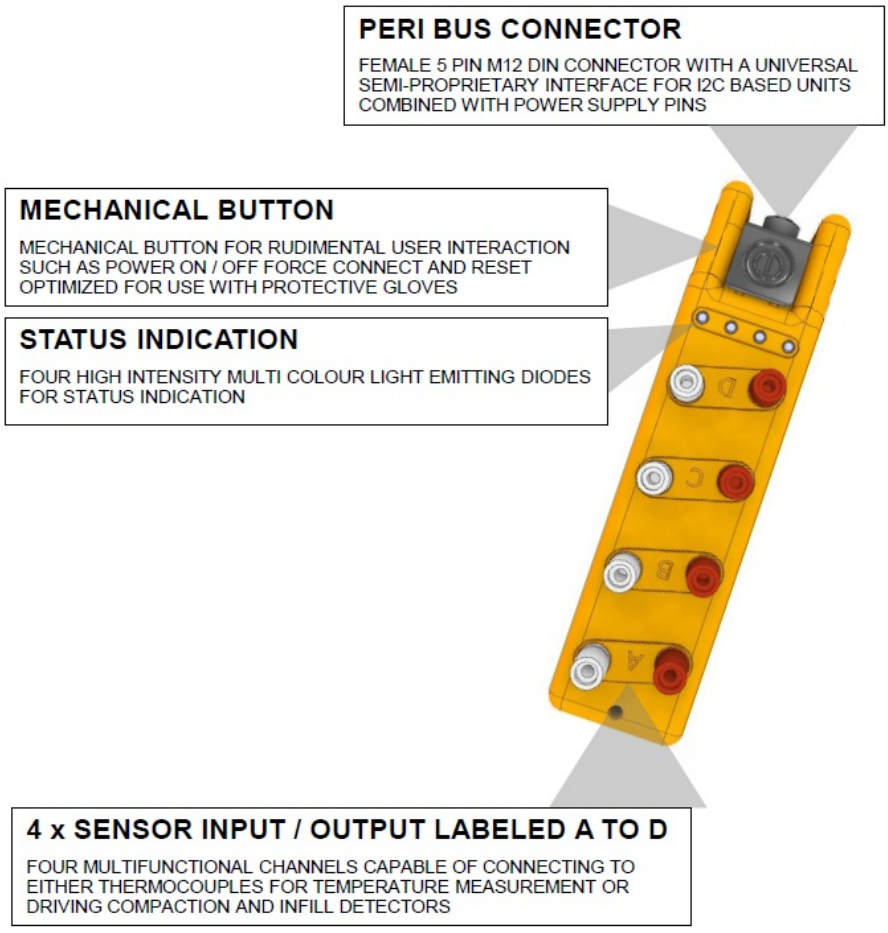
PERI InSite Construction Hub

The Main Unit for the InSite Construction Data Acquisition System has a wide range of connection capabilities. It can connect to the Cloud-based services using cable-based Ethernet or wireless uplink using LTE or WiFi. A range of alternatives for sensor connectivity is supported – either wirelessly via LR-WiFi, Bluetooth or semi-proprietary I2C-based PERI Bus. Furthermore, it is prepared for GNSS (satellite positioning).



InSite Construction Node

The first released of the ISC Node has four multifunctional analogue channels for sensors. Each channel can either connect to a thermocouple for temperature measurement or a compaction and infill detector. It can also connect digitally to other devices such as pressure transducers using the I2C-based PERI-bus or wirelessly via WiFi. The idea is to develop additional variants of the ISC Node in the future. Each with the same form factor but supporting a unique use-case and set of sensors.



InSite Construction Node

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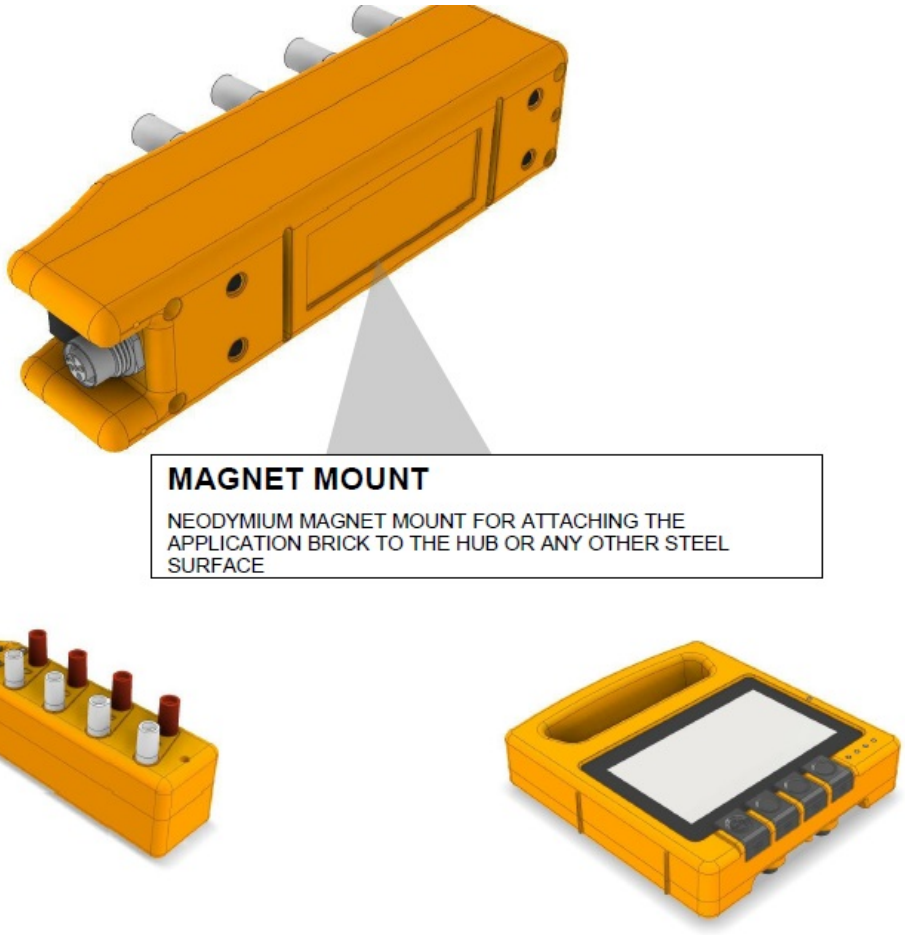
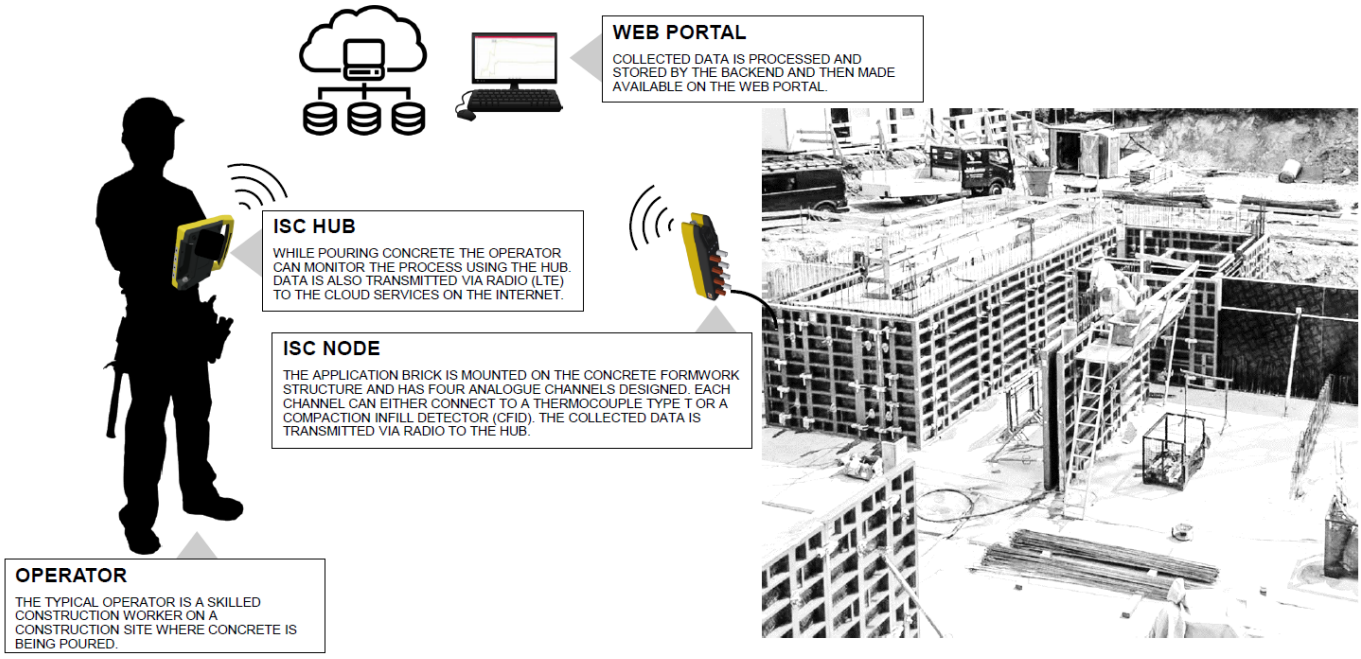


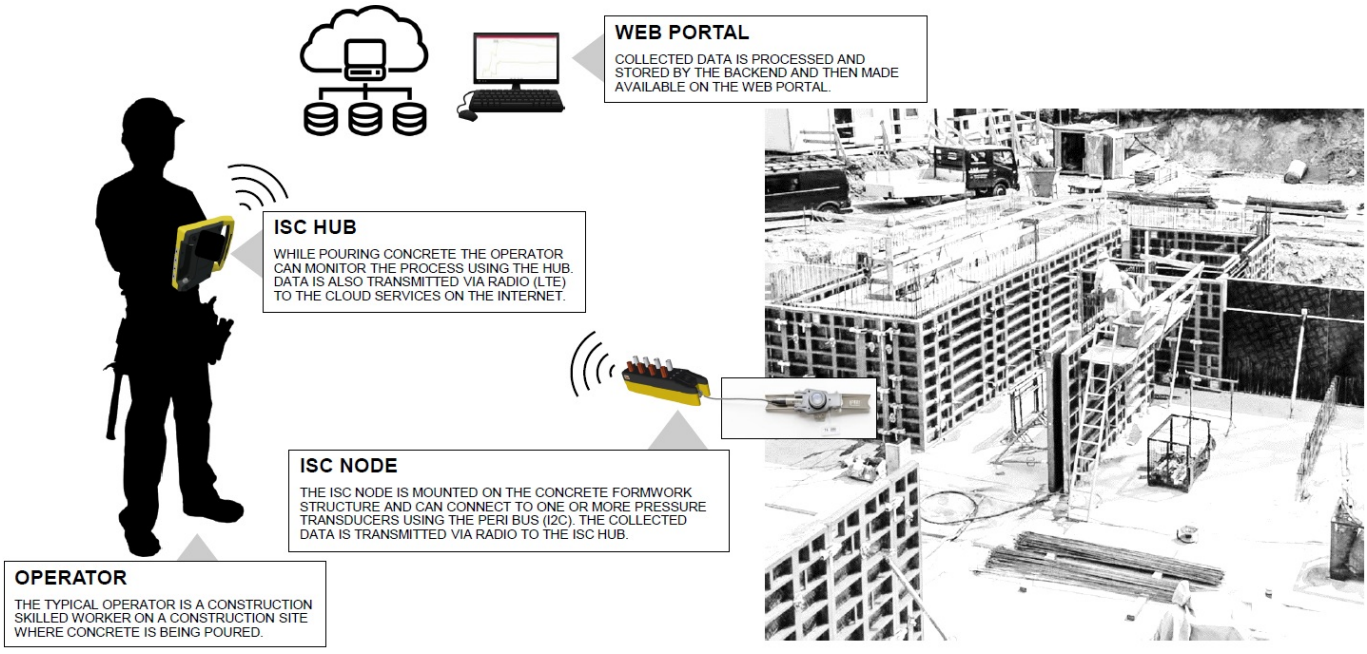
Use cases

Use case I – Measuring temperature and / or monitoring compaction and infill status
The ISC Node is attached to the formwork structure and is used to collect data, transmit it via radio to the Hub which in turn displays the data on the screen so that the operator can monitor the concreting process. The ISC Hub also acts as an uplink to the web portal on the Internet where the data is stored for future reference.



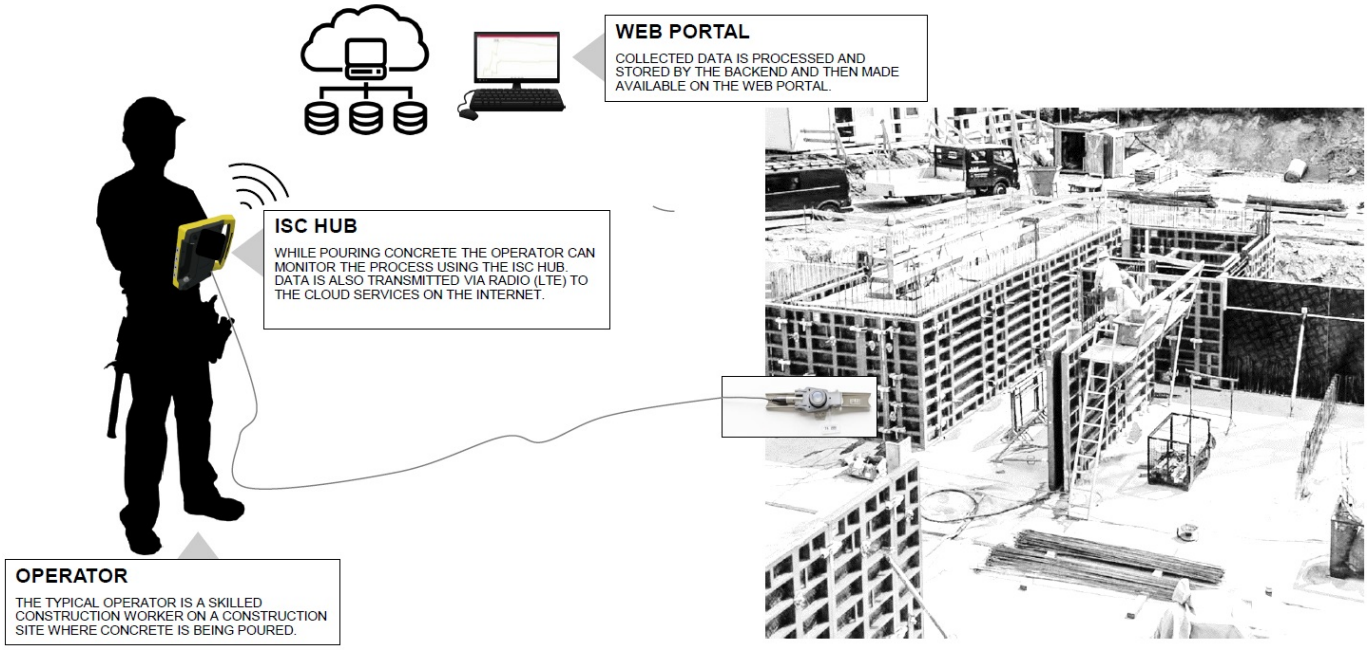
Use case II – Measuring concrete pressure acting on the formwork (form pressure)

The form pressure sensor is attached to the formwork structure and is used to measure the pressure, transmit the data via cable to the ISC Node which in turn relays the data to the ISC Hub via radio. The ISC Hub displays the data on the screen so that the operator can monitor the concreting process. The ISC Hub also acts as an uplink to the web portal on the Internet where the data is stored for future reference.



Measuring concrete pressure acting on the formwork (form pressure)

The form pressure sensor is attached to the formwork structure and is used to measure the pressure, transmit the data directly via cable to the ISC Hub which in turn displays the data on the screen so that the operator can monitor the concreting process. The ISC Hub also acts as an uplink to the web portal on the Internet where the data is stored for future reference.



Specification

- **Brand**: Vemaventuri AB
- **Model**: ISC Hub and ISC Node
- **Compliance**: FCC Part 15B
- **Interference Compliance**: Class A
- **Radiation Exposure**: FCC limits for uncontrolled environment

Frequently Asked Questions

Q: Can I modify the device without voiding FCC approval?
A: No, any modifications not approved by Vemaventuri AB may void FCC approval.

Q: What should I do if I encounter interference issues?
A: Ensure the devices are placed in an optimal location and refer to the user manual for interference handling.

Q: How do I know if the devices are properly connected?
A: Check for synchronization indicators on the devices and refer to the user manual for connection verification.

Documents / Resources

	Vemaventuri AB PICBKM01 ISC Hub and ISC Node [pdf] Instructions 2A6OFPICBKM01, PICBKM01 ISC Hub and ISC Node, PICBKM01, ISC Hub and ISC Node, Hub and ISC Node, ISC Node, Node

References

- User Manual