

BACKER IOT SMART TEMPERATURE CONTROLLER



Description

Developed to fill a gap in the digital control of our own heating products, the Backer IoT Smart Temperature Controller (HRDc) allows users to visualize and control energy usage and application temperatures remotely.

Heating equipment will nearly always be the highest user of energy on a commercial or industrial site – active monitoring and management can quickly benefit the user through energy savings.

Our Smart Temperature Controller is designed to be incorporated into integrated heating applications, built into our immersion heaters and also as a stand alone panel mounted independent controller.

The HRDc is designed to be fitted directly into your control or instrument panel with an easy to fit flexible housing. Both process and target temperatures can be easily viewed from the front screen and alterations to the set point can be made using buttons on the front panel.



Product photo

Features

Device management is a key principle in monitoring and controlling heating devices. The Backer IoT Smart Temperature Controller (HRDc) and Smart Immersion Heater (HRDi) are designed with the Internet of Things at the heart of their ability. They allow clustering of devices and management as part of a flexible device dashboard. This may be split by plant room, building or even across a global asset base. The addition of condition monitoring as an integral feature of the controller, allows users to develop condition monitoring strategies and maintenance routines. Flexibility is key – this means the ability to connect multiple temperature sensors as well as other auxiliary signals and be able to control a variety of outputs from heating elements to pumps and fans. The software is just as important as the hardware. Our in-depth knowledge of PID control, along with features such as condition monitoring can all be configured and monitored with our extensive suite of software.

Core features:

- Energy management
- Condition monitoring
- Integrated heating
- Ultimate connectivity
- Logic control

Applications:

- Process Control
- Building Management
- Staged Heating Control
- Scheduled Duty Cycling
- Remote Monitoring & Control

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Technical specification



Part number	Short description	Inputs					Outputs		Comms			IoT Service					
		Pt100 (2 wire)	Pt100 (3 wire)	Thermocouple input	0-10V	4-20mA	SSR 5VDC-240V AC, max 120mA (TO ext. contactor)	Interval Relay - EMR 5VDC-240VAC, max 5A	Modbus-RT	RS-485	Ethernet (RJ45 connection)	3 year software/firmware maintenance	Android config. app (local network)	3 year enhanced software features	Energy management module	Condition monitoring module	Logic function module
HRDC-21J3-11111V1	HRDc - all features	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1
HRDC-21P3-11111V1	HRDc - PT100	1	1	x	1	1	3	1	1	1	1	1	1	1	1	1	1
HRDC-21J5-11111V1	HRDc - stand alone	1	1	1	1	1	3	1	1	1	1	1	1	x	x	x	x
HRDC-21P5-11111V1	HRDc - PT100 stand alone	1	1	x	1	1	3	1	1	1	1	1	1	x	x	x	x