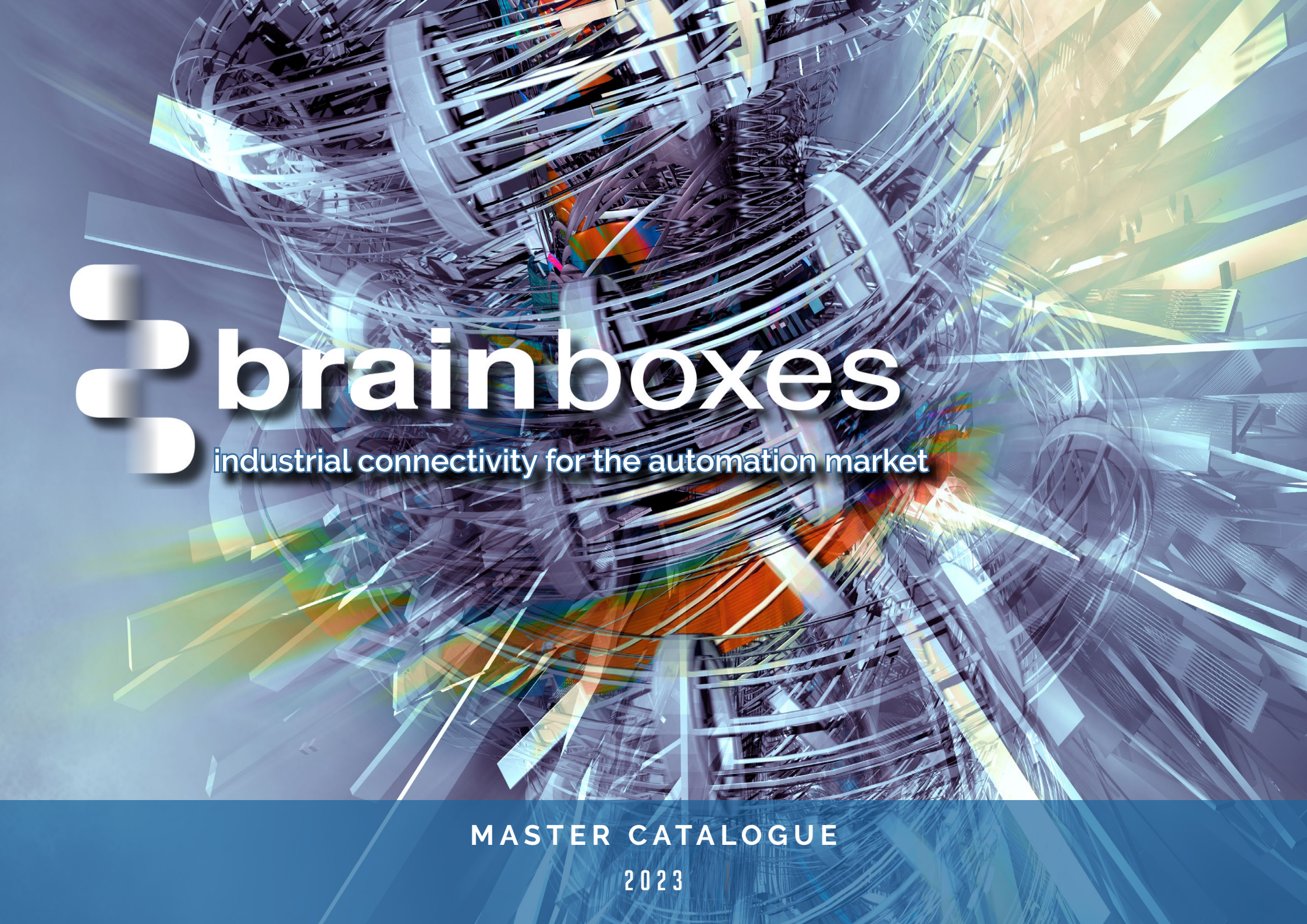
brainboxes
industrial connectivity for the automation market
MASTER CATALOGUE
2023

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INNOVATIVE INDUSTRIAL TECHNOLOGIES SINCE 1984

ABOUT BRAINBOXES

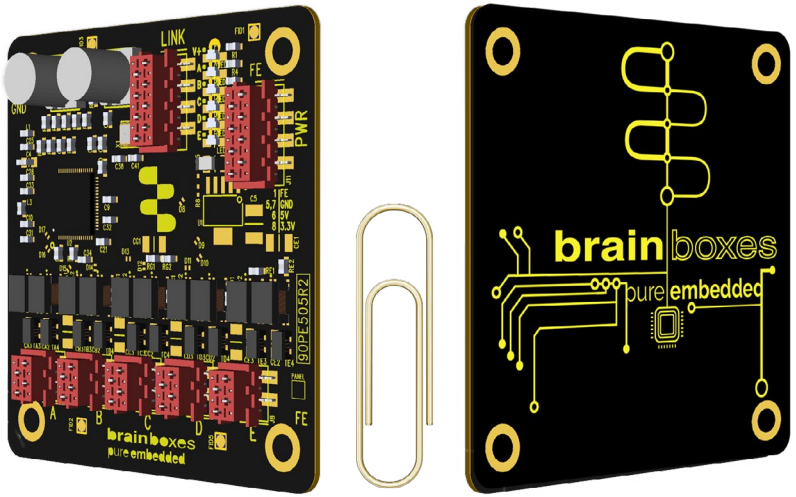
- Lifetime Guarantee
- Innovative Industrial Automation
- Free Product Evalution Programme
- Open-source Options

INDUSTRIAL CONNECTIVITY DEVICES FOR THE AUTOMATION MARKET

Since 1984, Brainboxes have developed, manufactured & supported our own core technologies. Today we are one of the leading communication device developers & manufacturers in the world.

Our smart hardware enables machine monitoring, connects industrial IoT projects, innovates factory automation & makes the remote feel right on site.

PURE EMBEDDED SWITCH



The perfect fit for any stable, future-proof system, even where space is really limited

Mega compact form – smaller than a standard business card (55x55x10mm)

3D CAD files and PCB footprints

Board to board and board to cable connection

Stability of design guaranteed for min. 10 years

INDUSTRIAL EDGE CONTROLLER: BB-400

-25˚C to +80˚C op temp range, 5-30VDC dual power input with built in mini UPS, DIN rail mountable

Powered by an industrialised Raspberry Pi & Ardunio

Process data locally & send to the cloud with open source tools

Multiple connections, built in UPS for power management

Easy to use secure web interface

SUSTAINING SMILES WITH SMART ENERGY MONITORING

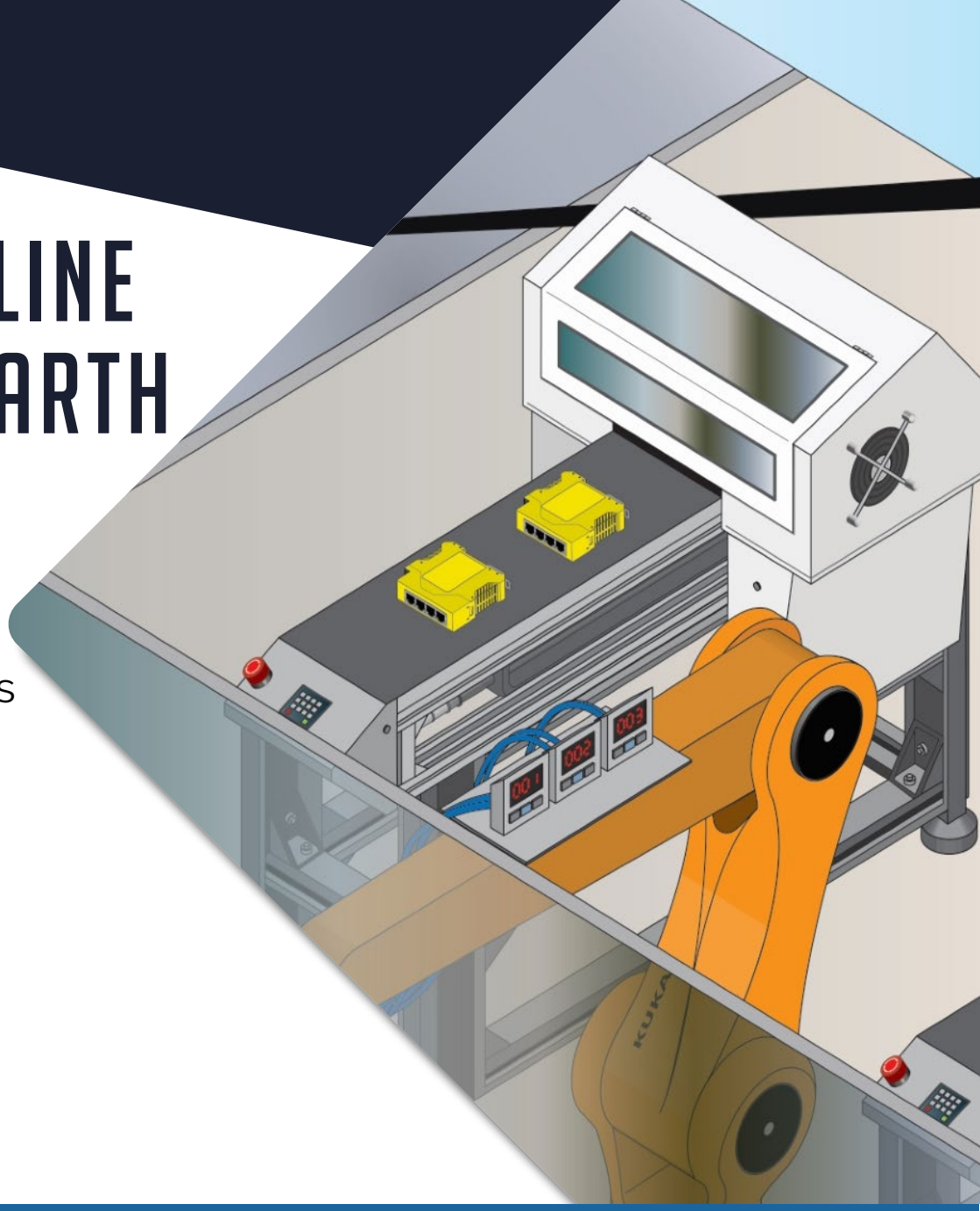
Brainboxes Smart Edge Controller (BB-400) provides an industrial solution for sub-metering, efficiently capturing & aggregating power data from across your entire facility

The BB-400 combines Brainboxes proven IO & serial connectivity with a range of network connections, allowing you to process data locally & send accurate data to the application of your choice

IMPROVE YOUR BOTTOM LINE WITHOUT COSTING THE EARTH

The first step in understanding energy costs is to monitor power consumption, simply achieved by retrofitting energy monitoring devices into the existing production environment

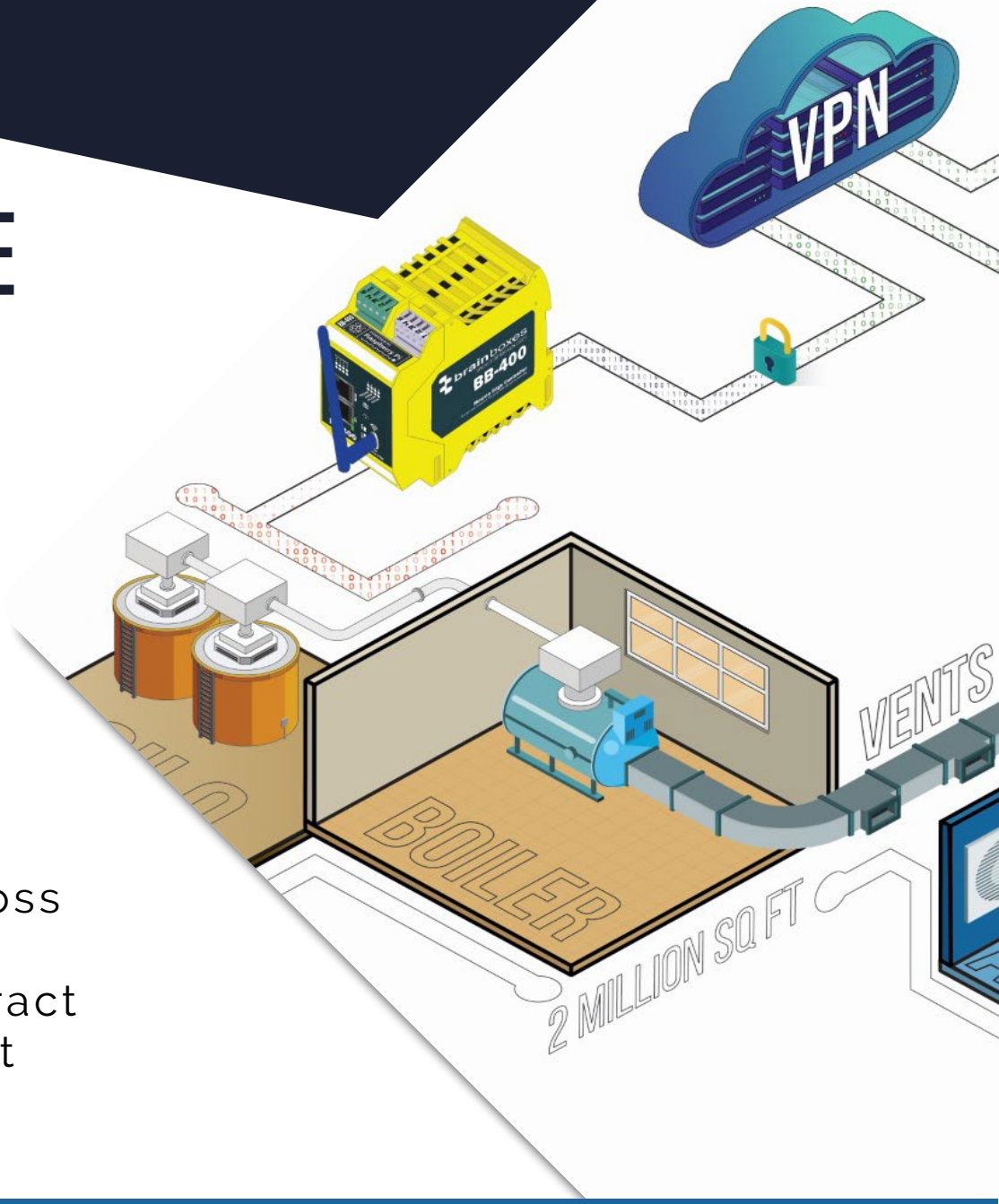
Brainboxes BB-400 Industrial Edge Controller allows you to monitor power consumption across your whole facility, capture timestamps & record historical usage data



FROM INDUSTRIAL WASTE TO CLEAN ENERGY

To tackle climate change, and achieve the target of net-zero by 2050, it is essential to reduce carbon emissions, lower carbon footprints & seek low-carbon fuel alternatives

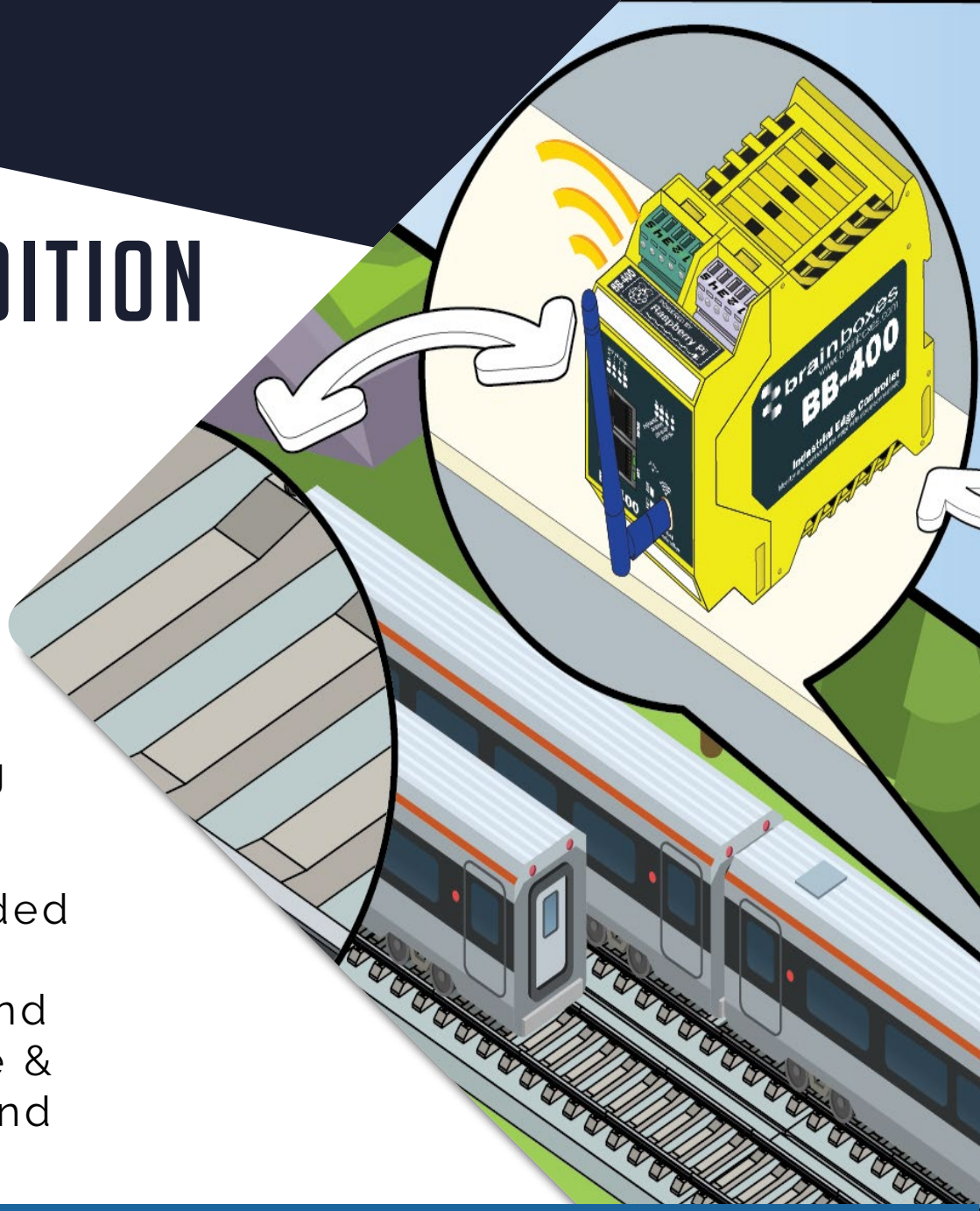
Brainboxes BB-400 Industrial Edge Controller allows communication across large networks, enabling the various elements of complex systems to interact over any distance; whether within vast factories or across the world



FULLY UNATTENDED CONDITION MONITORING ON TRAINS

Condition monitoring allows engineers to understand the health of key assets, such as railway journeys. This makes it vital to identify sections of the track that cause or contribute to the ride falling below acceptable comfort levels

This process leads to a fully unattended monitoring system. The Brainboxes BB-400 has the ability to gather & send accurate datapoints on comfort score & GPS location to the cloud every second



INDUSTRIAL ETHERNET SWITCHES: FAST ETHERNET SWITCH

Remote functionality for automation & monitoring

Available in a range of formats & specifications to provide the perfect solution for your application

Wide power input range enables devices to be run from a variety of sources

Simple, reliable network expansion

INDUSTRIAL ETHERNET SWITCHES: GIGABIT ETHERNET SWITCH

Designed for network intensive applications where data transmission is key

Connect to devices that are 10Mbs, Fast Ethernet (100Mbs) or Gigabit

Supports high-speed data transfer between devices

Increased speed, efficiency & performance

INDUSTRIAL ETHERNET SWITCHES: PoE ETHERNET SWITCH

Offer flexibility to deploy powered devices at almost any location

Simple to install, fully conform to IEEE 802.3af/at Ethernet standards for reliable performance

Less cost, less cabling, less maintence

Designed for demanding environments

ETHERNET TO SERIAL: POWER OVER ETHERNET TO SERIAL

Convert your RS232 or RS422/485 port into a network PoE Ethernet port

Serial port tunnelling allows serial cable replacement over any distance, no software required

User friendly interface, simple to use, power in operation

Connect to power & a network through a single cable

ETHERNET TO SERIAL: DB9 CONNECTOR

Install Virtual Com ports, communicate over TCP or telnet or use the software APIs for Visual Basics, C# & more

Serial port tunnelling allows serial cable replacement over any distance, no software required

Send RS232 or RS422/485 serial data over the network

Connect to remote devices as if they were attached locally

ETHERNET TO SERIAL: INDUSTRIAL ETHERNET TO SERIAL

Send RS232 or RS422/485 serial data over the network

Securely communicate serial data anywhere in the world

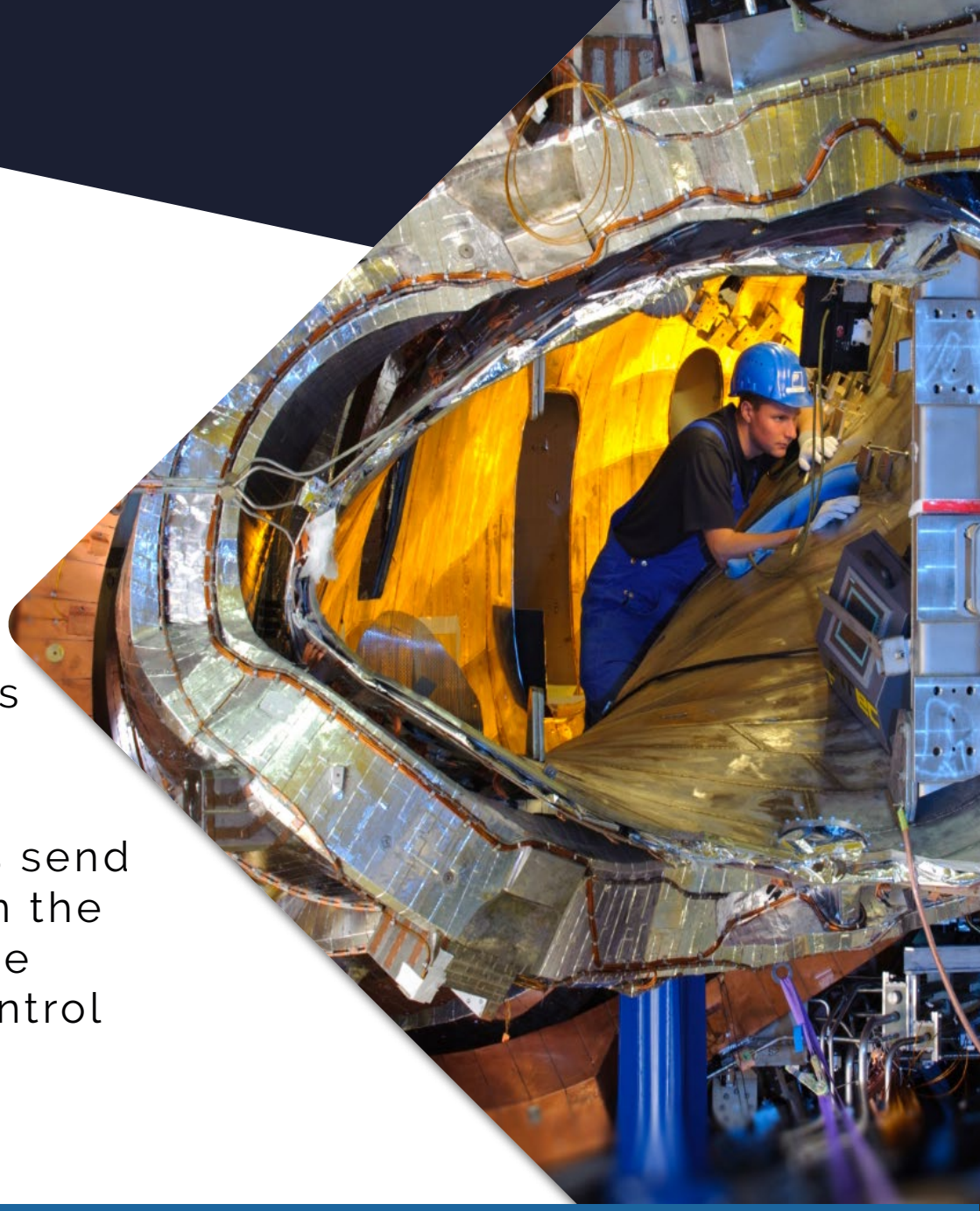
Quick & easy installation with removable screw terminal blocks

Wide range input power supply +5VDC to +30VDC

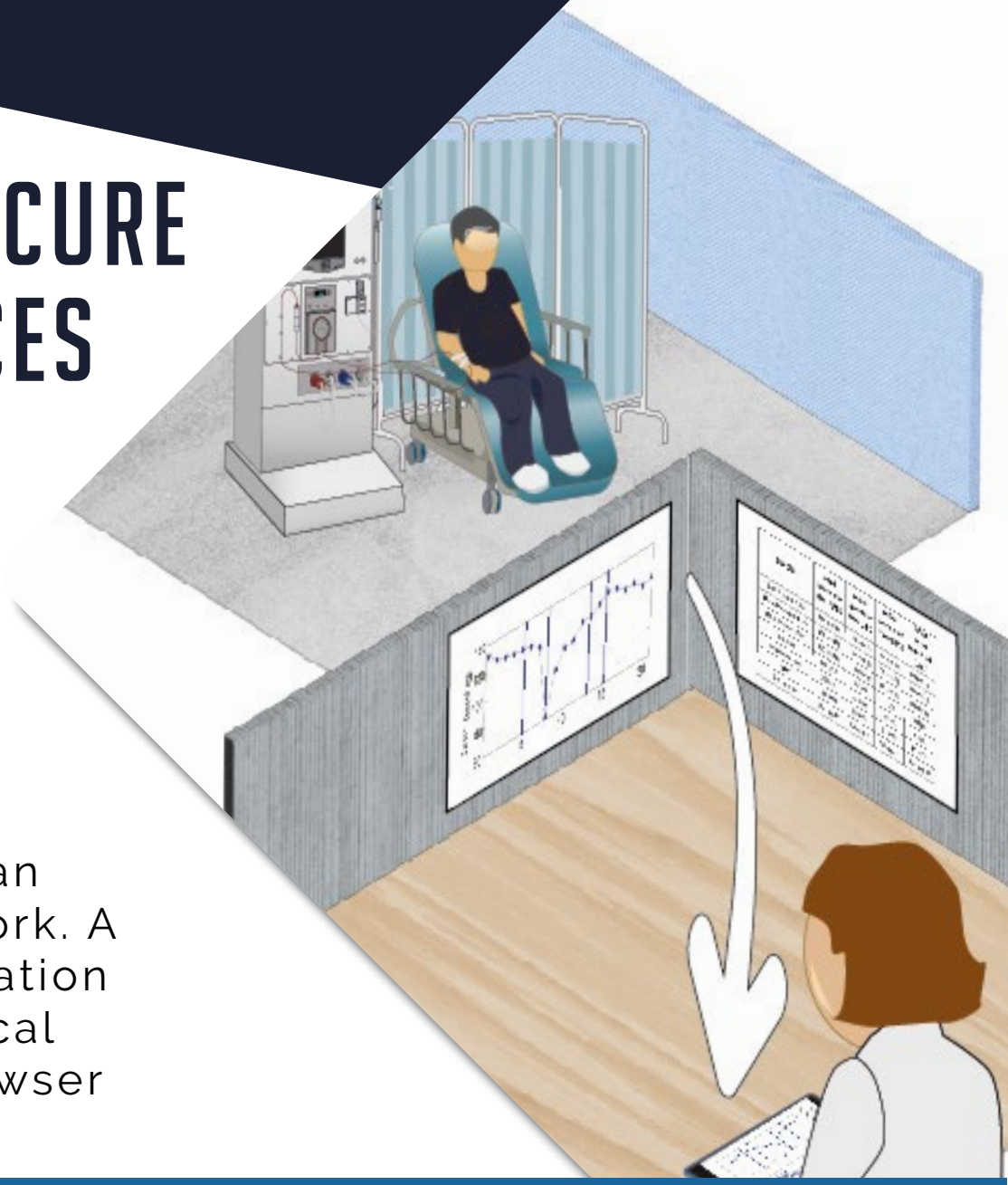
HARNESSING THE POWER OF THE SUN

Brainboxes ES devices help
The Max-Plank-Institute to measure parameters of plasma in extreme conditions, such as high temperatures of fusion fuel

Brainboxes Ethernet to Serial devices send critical data from sensors, installed in the diagnostic ports over the network. The data is remotely monitored on the control PC stationed a safe distance away



MEDICAL MONITORING SECURE DATA WITH SERIAL DEVICES



In the medical sector, information technology has advanced to drive a positive change concerning how doctors & nurses take care of their patients

Brainboxes Ethernet to Serial devices ensure that accurate data readings can be taken from anywhere on the network. A web interface allows secure configuration & control of the serial ports over a local network of the internet using any browser

UNDER THE GALATIC TELESCOPE

Whether on the submillimetre radiation of the cold universe, or the manufacturing processes of the production line, Ethernet to Serial modules allow you to access your data remotely from anywhere on earth

Serial connections ensure the fast & secure transmission of data, whilst Brainboxes Ethernet to Serial modules allow you to connect across your network to remote devices just as if they were attached side by side

REMOTE IO: ANALOG

Wide operating temperature range: -40˚C to +80˚C

Deliver industrial data exactly when & where you need it

Monitor inputs & control outputs instantly from any web brower

Interact with real-world data & applications

REMOTE IO: DIGITAL

Wide operating temperature range: -40˚C to +80˚C

Deliver industrial data exactly when & where you need it

Monitor inputs & control outputs of your factory floor machinery from anywhere

Connect digital sensors & transducers to bring data onto the network

REMOTE IO: TEMPERATURE

Temperature measurment range -200˚C to +600˚C

Supports simple ASCII TCP Protocol or ASCII over virtual COM port

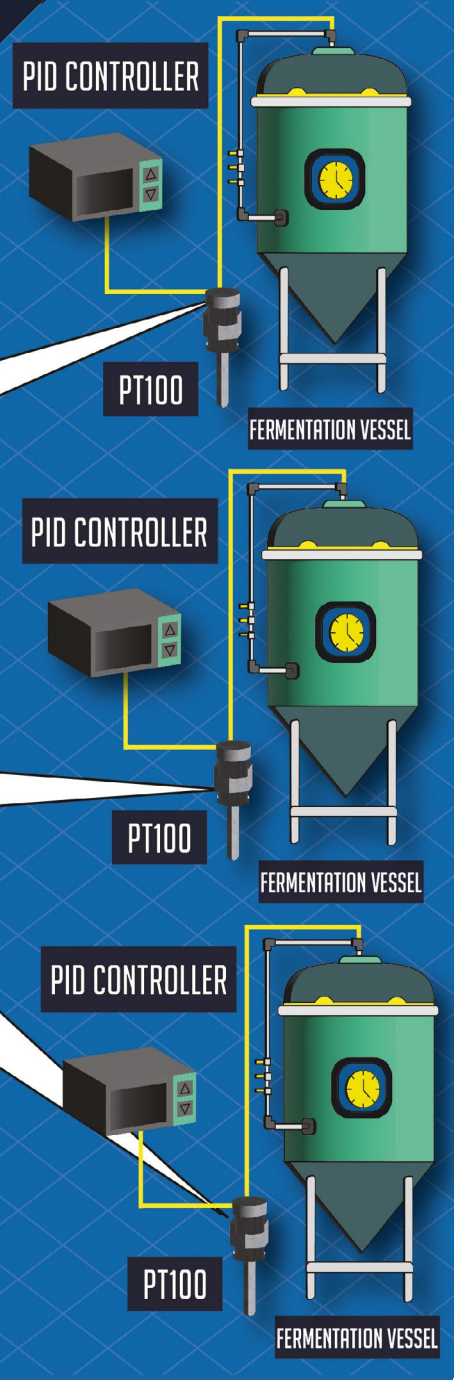
Open/short detection ensures readings are accurate

RTD IO module updates quickly

REMOTE TEMPERATURE MONITORING IN BREWERIES

Building an efective system for fermenting beer can be challenging, especially when it comes to montioring & controlling the temperature of fermentation vessels

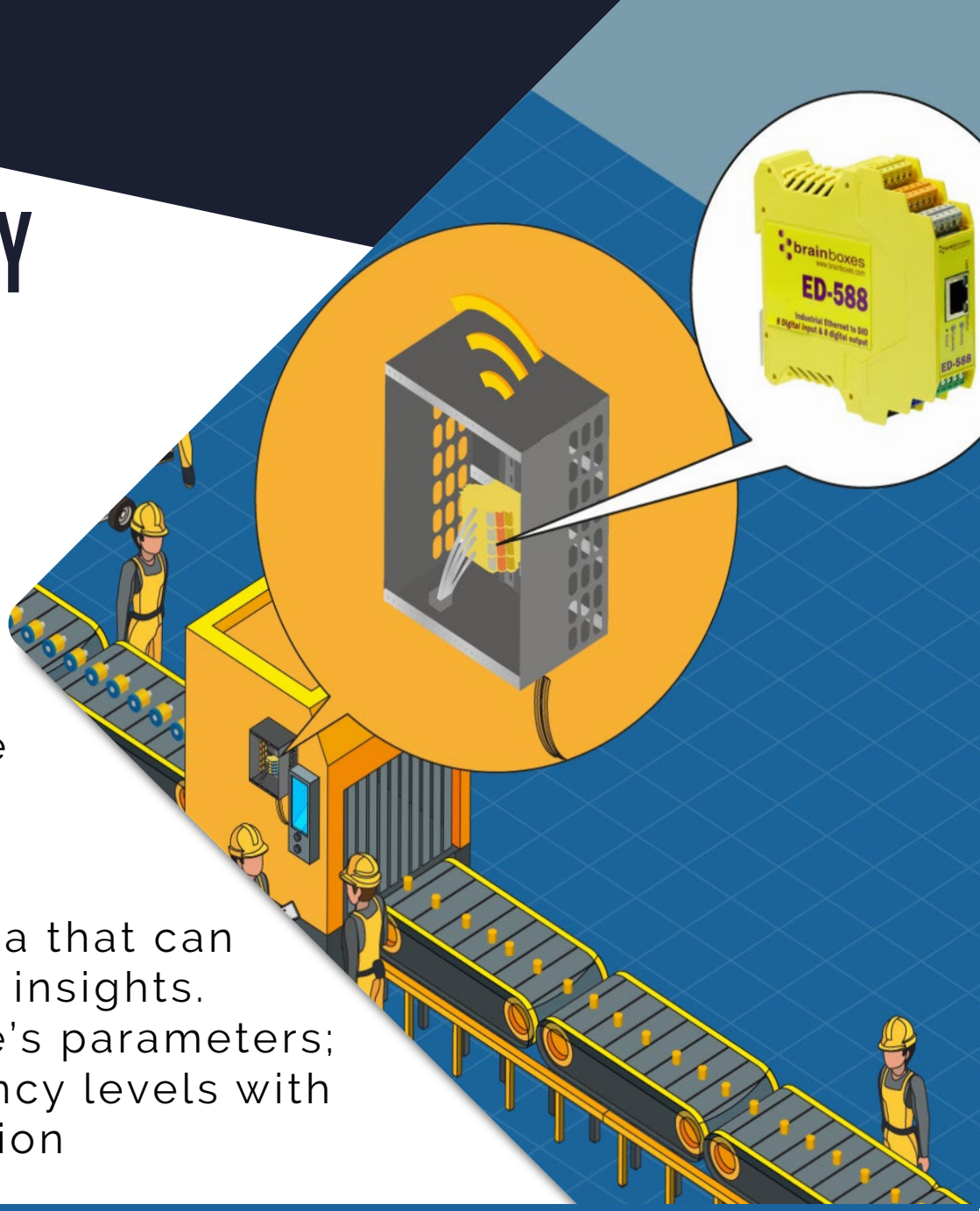
Using Brainboxes Remote IO devices, users can monitor inputs & control outputs from any location. The Brainbox can connect to sensors in different locations within the vessel to ensure data reflects the average temperarure across the whole vessel



TRANSFORM TO INDUSTRY 4.0 WITH AUTOMATED DATA CAPTURE

Sensors & transducers capture data from mechanical devices without the need for a PLC unit. The actions captured are sent to the ED-588 & the detailed data is pushed to the cloud server for processing

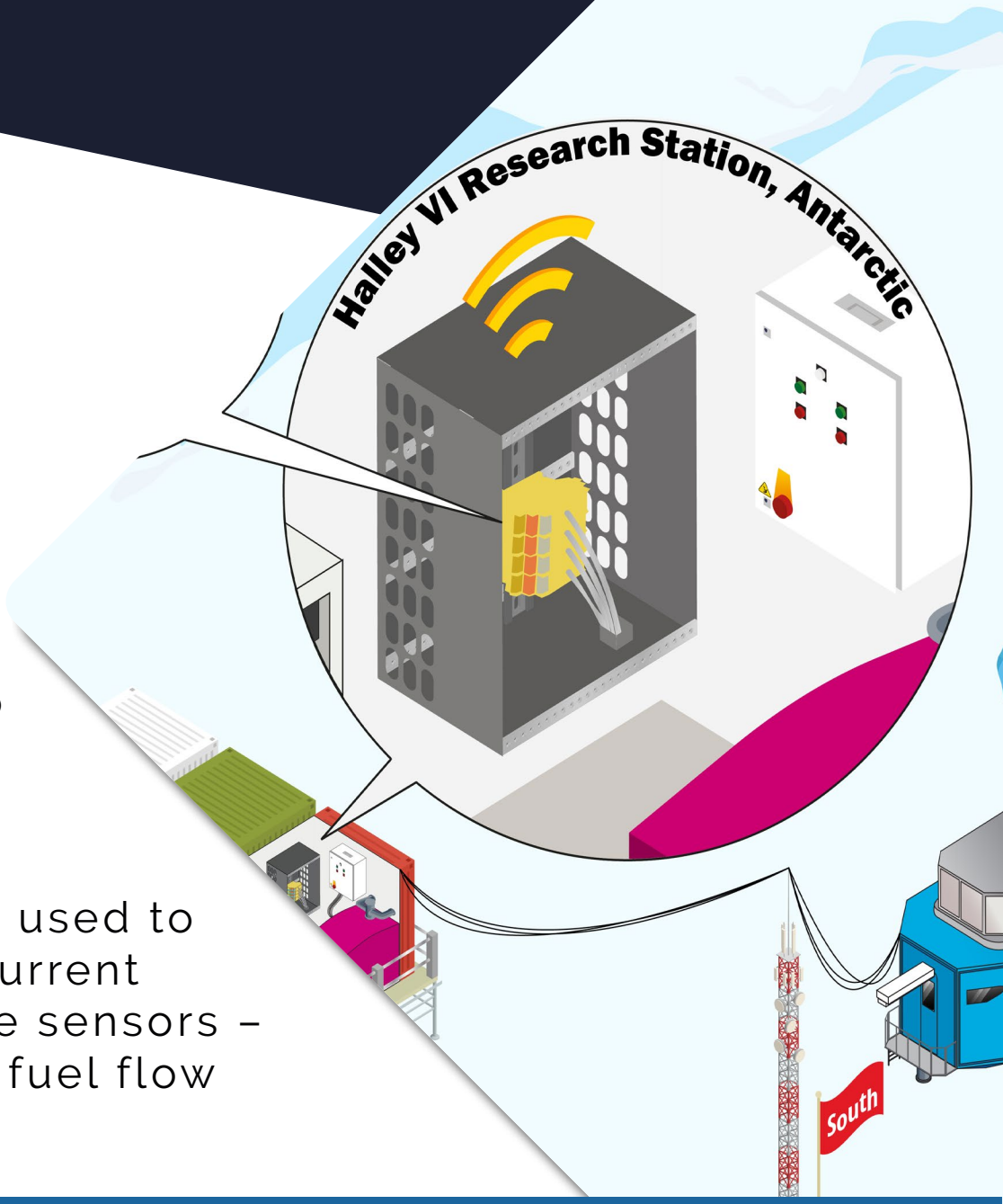
The Brainboxes ED-588 generates data that can predict behaviour & provide real-time insights. This enables you to control a machine's parameters; maintaining high production & efficiency levels with the lowest possible energy consumption



AUTOMATION IN THE ANTARCTIC

Thanks to an innovative autonomous power system developed by British Antarctic Survey's engineers using Brainboxes Analog Input modules, the station is able for the first time to remotely collect measurements all year-round

Brainboxes Analog Input modules are used to monitor the fuel tank level sensors, current sensors on the pumps, pump pressure sensors – both in & out - & also to measure the fuel flow



USB TO SERIAL

Send RS232 or RS422/435 serial data over the network

Stylish design combined with a spec rugged enough to withstand industrial environments

Proven functionality & performance in even the most demanding applications

Robust software for excellent application compatibility

USB TO SERIAL: USB-C TO SERIAL

Convenience of multiple power options

Covert your RS232 or RS422/48 port into a network PoE Ethernet port

Transmit both data & power on a single cable

Quick, safe & simple to install

ACCESSORIES

Available seperately with no minimum order quantity

Power supplies: multi-country adapters & alternative power supplies

Cables: alternative multiport, USB & ribbon options

Application specific add-ons

Create your personal gameplan for **Digital Transformation**

Get your free factory monitoring playbook here

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