

JEA

Advanced Energy Saving Controller
with Connectivity Options





ADVANCED CONTROLLER & DISPLAY CONFIGURATION

ADVANCED LEARNING CAPABILITY

The JEA is an Energy Management Device (EMD) which learns the usage behaviour of the cooler and constructs a pattern for the compressor and lights to deliver an energy saving routine which will be most cost effective and extend equipment life.

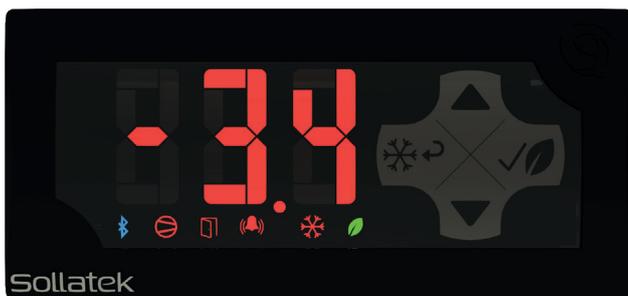


SOPHISTICATED MENU CONFIGURATION

The JEA has a multi-level menu which can be password protected so unauthorised personnel cannot access or save changes. Within the menu, a large range of settable parameters can be viewed and configured to create operating modes to suit your needs.

CAPACITIVE TOUCH BUTTONS

The four capacitive touch buttons located on the front of the JEA allow for easy operation. The buttons can be used for; browsing menu items, configuring parameter values and manually setting controller modes (e.g. switching to energy saving mode).

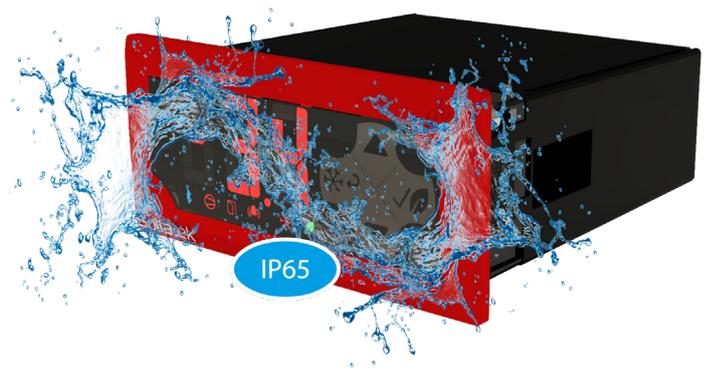


HYDROCARBON REFRIGERANTS COMPATIBLE

Hydrocarbon refrigerants are becoming increasingly popular as an alternative to CFC refrigerants however, their volatile nature means equipment must be nonsparking in the event of a gas leak. The JEA controller is hydrocarbon compatible with hydrocarbon-rated relays.

IP65 FRONT PANEL

The construction of the JEA ensures the front has a high ingress protection rating (IP65). This means the JEA can also be installed in more humid and aggressive environments. The JEA will withstand frequent washdown and sanitation processes.

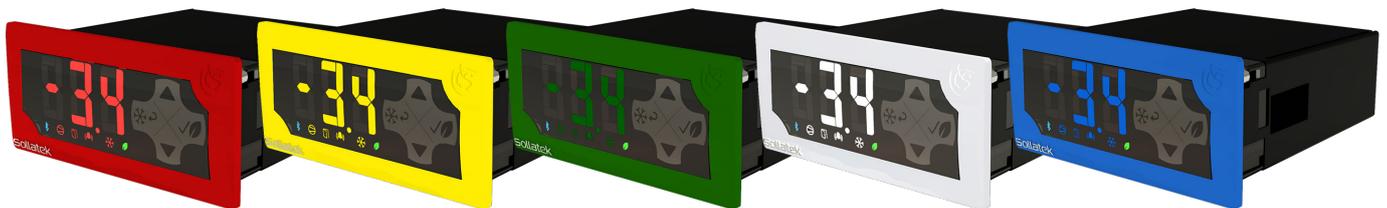




FLEXIBLE CONFIGURATION & CUSTOMISABLE DISPLAY

MULTI-SENSOR CONTROLLER - MAXIMUM SYSTEM EFFICIENCY

The JEA is a multi-sensor controller / EMD to give you maximum flexibility in configuration and complete control of cooler functions. The JEA allows the control of up to 4 outputs for compressor, lights, fan, and heater (defrost and cooler) control and 5 sensor inputs which accept temperature probes, door switch, PIR or any other input required.



CUSTOMISABLE FRONT BEZEL

The JEA is available with a customisable coloured front bezel to suit your branding and cooler aesthetics. The JEA fits industry standard apertures making it ideal for use in new or existing coolers.

HIGH VISIBILITY LED DISPLAY

The JEA is made up of 3 digits, with 6 status indicators all lit up with modern, bright LEDs to enhance visibility and simplify the reading of the display.

The JEA is available with Red, Yellow, Green, White, or Blue LED display.

CONNECTIVITY & GEOLOCATION

INTERNAL BLUETOOTH (optional)

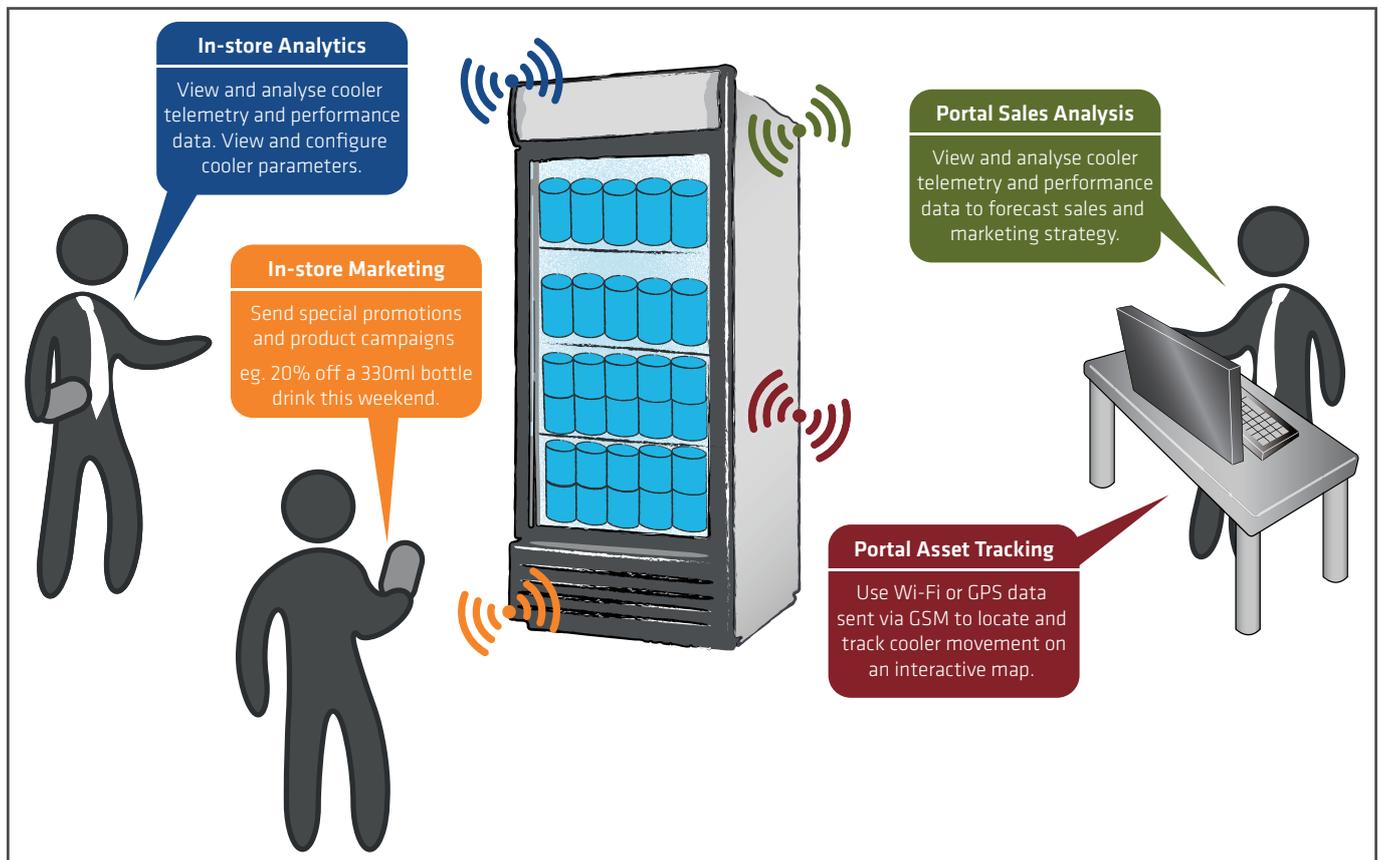
JEA controllers are equipped with Bluetooth capability, enabling them to connect to the Sollatek smart device application. The Sollatek app has extensive cooler management capabilities.

The JEA controller also features iBeacon and Eddystone beacon capabilities allowing proximity marketing to send engaging and interactive content to consumer smartphones while they buy in real-time.

EXTERNAL CONNECTIVITY

The GMC4 is an advanced connectivity device which provides the JEA with always-on and proximity connectivity (2G or LTE-M & BLE) to send controller data to the online portal or Sollatek smart device App.

The GMC4 also senses Wi-Fi for precise asset geo-positioning. A rechargeable battery allows the GMC4 to transmit data and location without mains power.



FFX PORT EXPANDER - THE COMPLETE FUTURE-PROOF CONNECTIVITY SOLUTION

The FFX is a fully customisable port expander which allows up to 4 plug-in connectivity modules including GSM and location. The FFX has been designed to accept tomorrow's connectivity solutions including LTE-M, LoRa, NB-IoT and SigFox.





SMART DEVICE APPLICATION & ONLINE PORTAL

ONLINE PORTAL AND APPLICATION DEVELOPED BY OUR WORLD LEADING PARTNERS

Sollatek provides smart device and online solutions for total fleet management. Our solutions provide detailed analytics for cooler operational status and sales performance. At Sollatek we understand the importance of efficiency for our customers, so we have developed user-friendly interfaces to ensure data is easy to read and accessible.



ONLINE PORTAL FOR COMPLETE ANALYSIS

The Sollatek online portal turns your fleet data into useable sales and performance data.

Detailed Reports - View a vast list of controller operational data such as temperature, event history and alarms.

Intelligent Data Analytics - Monitor technical and operational data in easy to read graphs and charts.

Accurate Sales Performance - view and analyse cooler KPI's for enhanced sales forecasting and strategy.

Dynamic Map - View and track cooler movements within a map and view the operational status of each cooler.

iOS AND ANDROID SMART DEVICE APPLICATION

The Sollatek smart device application provides technicians with all the tools to view, configure and upload controller status and event data.

Real-Time Data Analysis - View real-time telemetry data, operational status and performance data.

Cooler Event Log - Access all historical data which has occurred between store visits to identify any issues or problems.

Manage Settings And Parameters - View, configure or reset JEA controller parameters for cooler optimisation. Set BLE beaconing protocols and event logging settings.

Connect To The Cloud - Upload data to the cloud for access on the online portal for further analysis.





TECHNICAL SPECIFICATIONS & MECHANICAL DRAWING

TEMPERATURE CONTROL SPECIFICATIONS

Temperature Control Method	Air or Evaporator
Temperature Control Range	-50°C to +90°C (-58°F to +194°F)
Temperature Control Modes	Day or Night Normal Mode, Eco Mode, Superfrost Mode
Defrost Control	Manual, Timed or Active
Timed Defrost	Real time, Accumulated time or Continuous time
Duration Between Defrost	1 - 255 hours
Defrost Duration	1 - 255 mins
Active Defrost	
Defrost Start Temperature	-50°C to +90°C (-58°F to +194°F)
Defrost End Temperature	-50°C to +90°C (-58°F to +194°F)
Energy Saving	Self Learning Algorithm - 7 day operating pattern Switches from Day or Night automatically to maximise cooler efficiency Advanced breakout features
Intelligent Time Delay	0 seconds to 10 minutes - maximise compressor availability
Temperature Blind Time	1 to 255 sec

DISPLAY SPECIFICATIONS

Display Type	3 x 7 segment digit, LED display
Digit Height	16.6 mm
Display Colour	Red, Yellow, Green, Blue & White
Annunciators	Decimal point & 6 x operational status indicators Compressor, Door, Alarm, Superfrost, Eco mode & Bluetooth
Keypad	4 x capacitive touch buttons Up, Down, Back/Superfrost Mode, Tick/Eco Mode
Front Bezel	Customisable colour to match cooler aesthetics

INPUT AND OUTPUT SPECIFICATIONS

Input Type	Temperature Probes, Door Switch, Passive Infra-Red (PIR)
Temperature Probe Type	10 k Ω NTC ($\beta_{25/85}$: 3975 K)
Input Connector	1 x 2-way RAST Edge connector and 4 x 3-way RAST Edge connectors
Output Control	Compressor, Evaporator fan, Condenser fan, Lights, Defrost heater, Cabinet heater *Lights and Fan can be powered from 12 or 24 VDC supply
Relays	Compressor Relay: 16 A Aux 1 Relay: 10 A Aux Relay 2/3: 5 A
Power / Output Connector	Up to 7 x 0.25" (6.35 mm) Fast-on
Data Connector	8-way connector

VOLTAGE PROTECTION SPECIFICATIONS

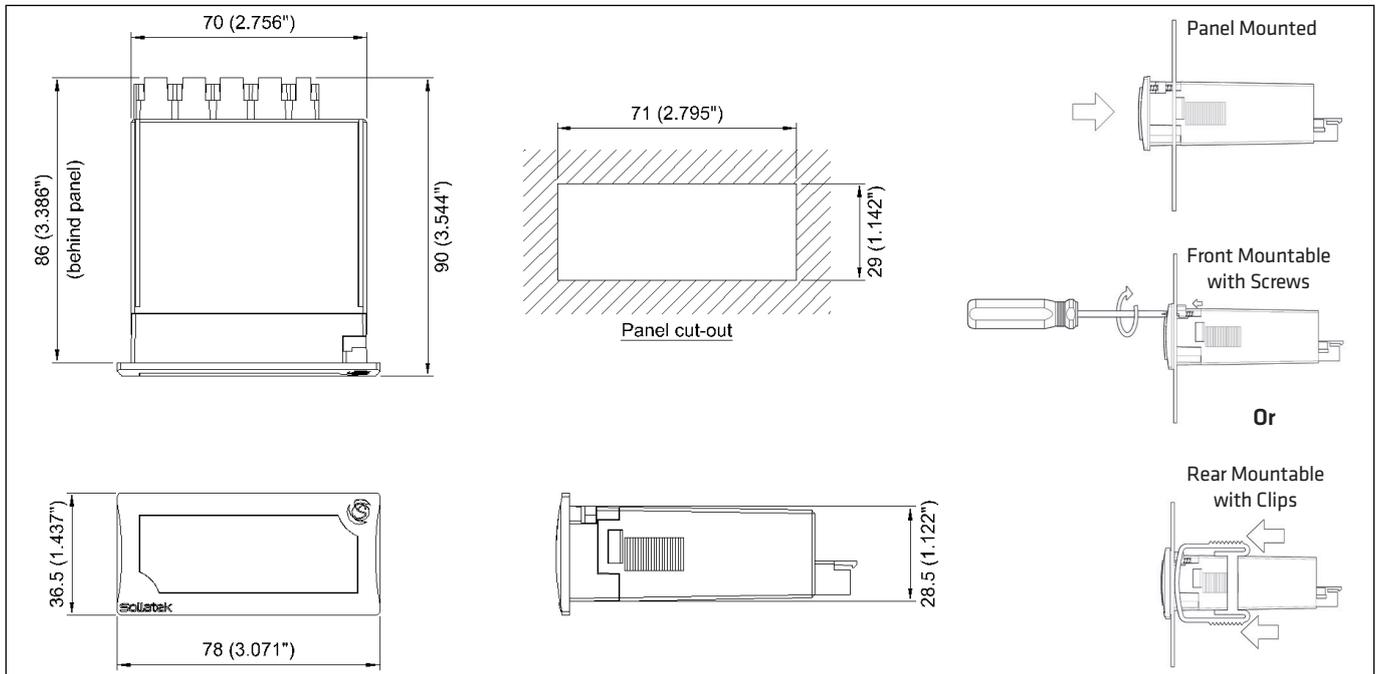
Voltage Protection	High and Low voltage disconnect
Operating Voltage	90 - 300 VAC
Immediate Disconnect Voltage	60 / 300 VAC
Low Voltage Blind Time	0 - 255 sec
High Voltage Blind Time	0 - 255 sec
Working Frequency	Auto-sense 45/65 Hz
Surge Protection	6.5 kA, <10 ns, 160 J

BLUETOOTH AND BATTERY SPECIFICATION (OPTIONAL)

Bluetooth Version	4.1
Connectivity	iBeacon, Eddystone & connection to the Sollatek smart device application
Memory	On-board storage of approx. 13,000 events
Battery (if fitted)	
Battery Type	Rechargeable Lithium coin battery
Nominal Voltage	3 V
Capacity	17 mAh
Operating Life	Approx. 50 days (dependent on beaconing protocol(s) and frequency requested by client)

MECHANICAL SPECIFICATIONS

Mounting	2 options for Panel Mounting Front Mounting: Screws : Rear Mounting: Clips
Operating Conditions	
Operating Temperature	-20°C to +60°C
Operating Humidity	0 - 100%
Ingress Protection	IP65 Front for wash-down
Unit Dimensions	78.0 x 90.0 x 36.5 mm
Unit Weight	Approx. 116 g depending on model
Certification	CE, IEC 60730-1, IEC 60730-2-9, UL94-V0 CO2 & Hydrocarbon (per IEC 60079-15)



Model Selection

The JEA can be customised to your requirement. Ordering a JEA is easy and model codes have been created to identify key features:

JEA	Display Colour	Number of Relays	Options
R	Red	1 = 16 A only	B = BLE + Battery
Y	Yellow	2 = 16 A + 5 A	S = Self Learning
G	Green	3 = 16 A + 2 x 5 A	
B	Blue	4 = 16 A + 10 A + 2 x 5 A	
W	White		

E.G. **JEA-R4BS** is a JEA with:
Red Display,
4 Outputs,
BLuetooth + Battery,
Self Learning Function

Sollatek's **expertise** extends **worldwide** through **local networks**



Global and Local

With a customer base across the world, a local presence in more than 50 countries and dedicated OEM offices in 5 continents, Sollatek is able to provide support services wherever you are.



SOLLATEK UK LTD.

Tel: +44 (1753) 214 500

sales@sollatek.com

www.sollatek.com

Sollatek (UK) Ltd.

Sollatek House, Waterside Drive, Langley, Slough SL3 6EZ, UK

ISO9001: 2015 accredited company

All weights and dimensions are approximate. Specifications are subject to change without prior notice. ©Sollatek (UK) Limited 2018. All Rights Reserved. SOLLATEK and the SOLLATEK device are the trade marks of the Sollatek group of companies.

MBA

15/01/2019

JEA Controller Brochure v2 Jan 2019
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