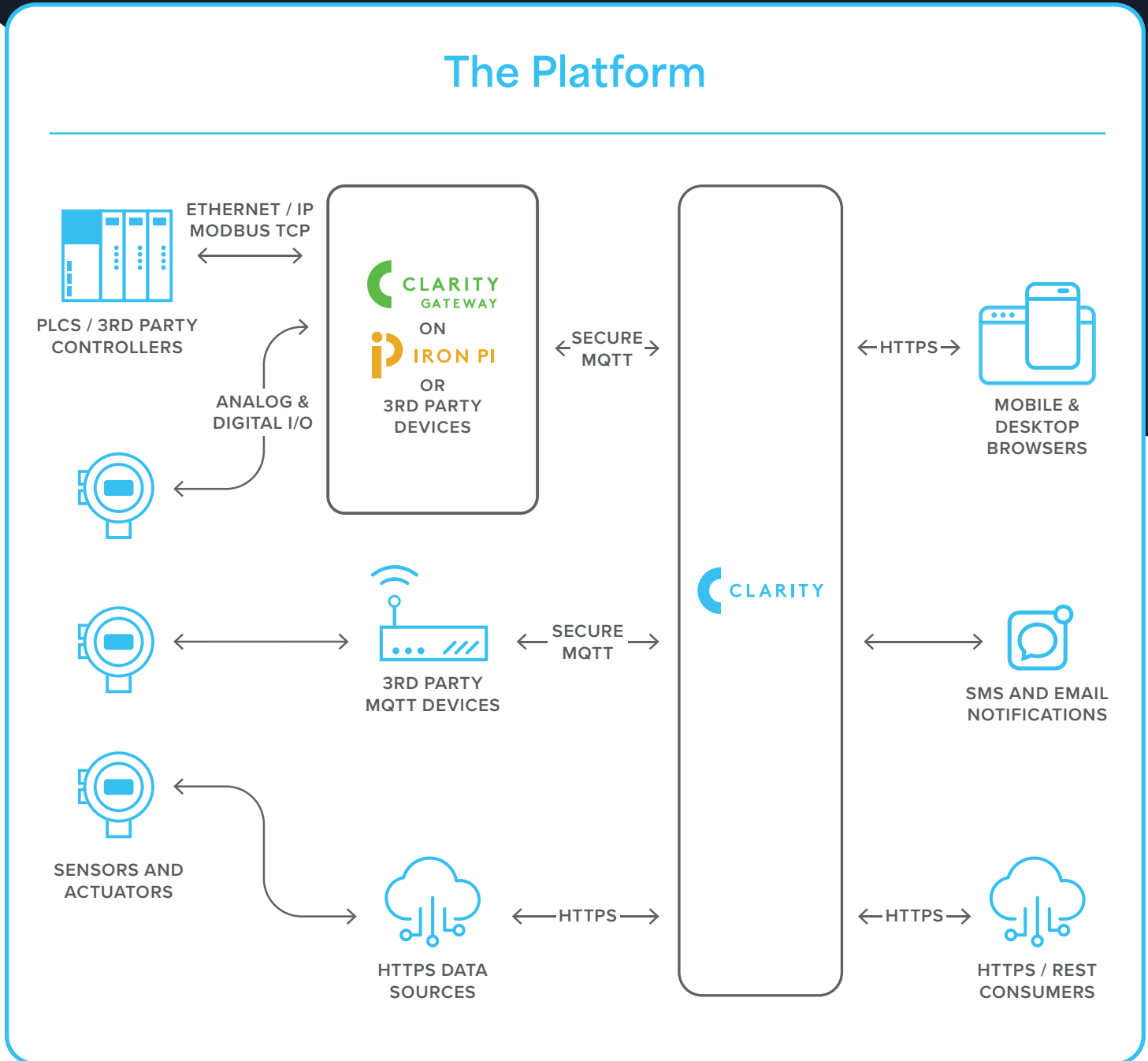# jc●re

Seamless Industrial Monitoring

jcore

Connecting sensors and machines to the people who manage them.

Clarity Gateway software and Iron Pi hardware make it simple to connect legacy controllers and raw sensors to the cloud. The Clarity cloud suite ingests data from JCore and 3rd party sources, stores it in a high performance data historian, and drives real-time visualizations and alarm notifications.

The Platform

ETHERNET / IP
MODBUS TCP

PLCS / 3RD PARTY
CONTROLLERS

ANALOG &
DIGITAL I/O

CLARITY
GATEWAY
ON
IRON PI
OR
3RD PARTY
DEVICES

SECURE
MQTT

CLARITY

HTTPS

MOBILE &
DESKTOP
BROWSERS

3RD PARTY
MQTT DEVICES

SECURE
MQTT

SMS AND EMAIL
NOTIFICATIONS

SENSORS AND
ACTUATORS

HTTPS DATA
SOURCES

HTTPS

HTTPS

HTTPS / REST
CONSUMERS

CLARITY

Clarity brings real time industrial data directly to your web browser.

With flexible dashboards, powerful charts, and mobile compatibility, your critical data is always within reach. Clarity's built-in MQTT broker makes secure device communications a snap, and our support for HTTPS/REST APIs makes it easy to integrate other data sources or analytics tools.

POWERFUL DASHBOARDS

See real time and historical data without installing any apps or desktop software. Clarity's simple user interface works right in your mobile or desktop browser.

ROBUST REPORTING

Better understand your operations with periodic reports. Add just the tags and aggregates you need, set the desired interval, and send the report to only those who need it.
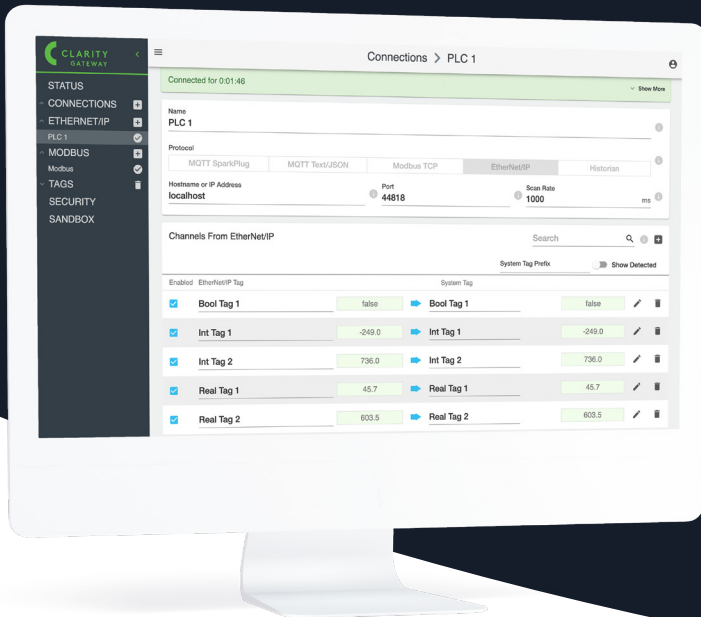
SMART NOTIFICATIONS

Be instantly notified by email or SMS when the unexpected happens. Set custom triggers for each tag with an associated severity level, and only send notifications to those who need to be notified. Optionally, repeat unacknowledged notifications a certain number of times.

COMPREHENSIVE SECURITY

Role based access control lets you give each user exactly the access they need. User Groups and Device Groups make it easy to manage permissions in large fleets. And with Dedicated Clarity, you can set up customer organizations to ensure that your customers don't see each other's data.

Experience Clarity: **jcore.io/clarity**

jcore

CLARITY GATEWAY

Clarity Gateway makes it easy to connect your edge data sources to the cloud.

The interactive web interface lets you map data and inspect values in real time. With support for Modbus, MQTT, and EtherNet/IP, Clarity Gateway provides a secure bridge between legacy industrial protocols and secure cloud applications. Run Clarity Gateway on JCore Iron Pi hardware, or on your existing routers or computers using our publicly available Docker images.
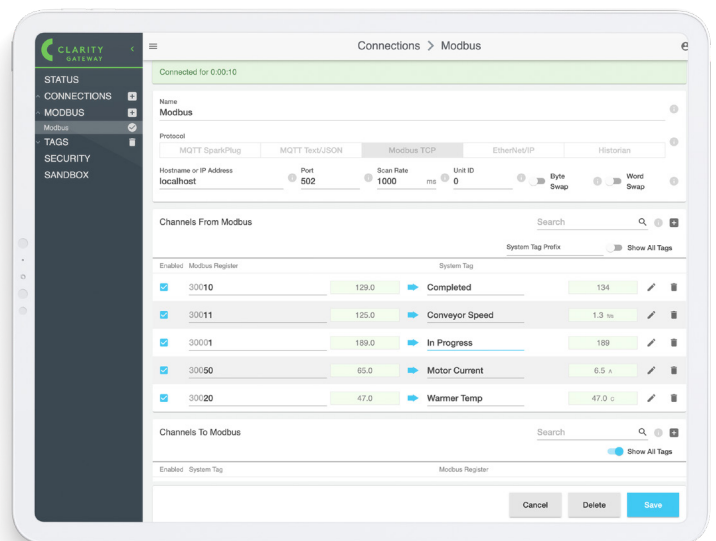
RELIABLE DATA COLLECTION

Reduce downtime with extensively tested software to send your data to the cloud. Prevent data loss with store and forward (MQTT only), which fills in time gaps when network connectivity is restored.

EASILY CONFIGURABLE

Automatically detect the entire tag map of your EtherNet/IP device, or manually configure mappings from Modbus devices. Each tag's destination tag name, slope, offset, display value range, rounding, and unit labels can be configured at the edge and automatically sent to the cloud.

IMPORT AND EXPORT

Configure a fleet of Clarity Gateway instances by exporting a desired configuration as a CSV or JSON file on one instance, and importing it in another.
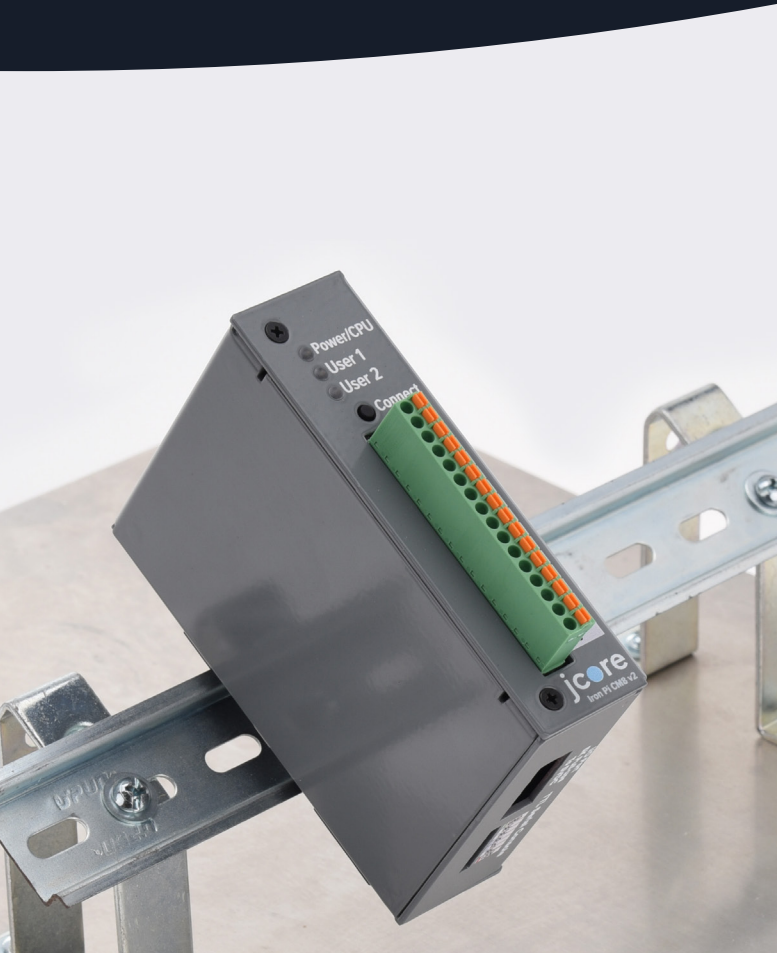
Connect Your Devices: jcore.io/clarity-gateway

IRON PI

The Iron Pi makes the vibrant Raspberry Pi software ecosystem available in demanding industrial environments.

Use the on-board Clarity Gateway software to connect to the cloud with zero code, or build your own solution using thousands of open source packages available for the Raspberry Pi OS. With 8 multi-function I/O points and two industrial serial ports, the Iron Pi has the connectivity to support your industrial IoT application.

POWERFUL INDUSTRIAL HARDWARE

The Iron Pi combines a Raspberry Pi compatible core with industrial-grade I/O points, serial ports, USB / Ethernet ports, storage, and power supplies.

- 8x Multi-Function I/O Ports with Analog Input, Digital Input, and Digital Output modes
- 1 x RS-485 serial port
- 1 x RS-232 serial port
- 4GB On-board Flash Storage
- 1GB RAM
- 1.2GHz Quad Core ARM Processor

OPEN AND EXTENSIBLE

The Iron Pi runs the open source Raspberry Pi OS, so you can seamlessly migrate your existing Raspberry Pi applications to hardware that's built for industrial use. Run our fully supported Clarity Gateway software, or build your own solution using Python, NodeJS, Java, and many other 3rd party solutions.
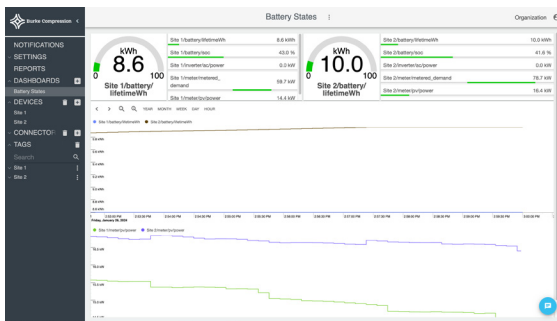
Sharpen Your Edge: jcore.io/iron-pi

jcore
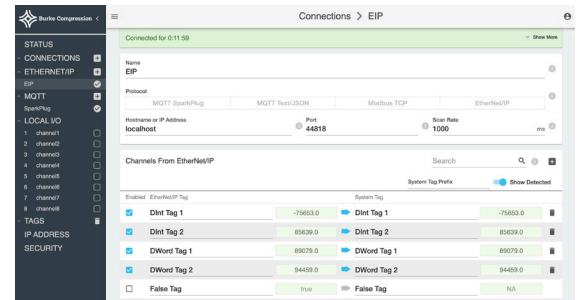
White Label Solutions

Sell real-time connectivity to your customers with JCore's private label solutions.

We customize the look and feel of each of our products to align them with your brand identity.

Dedicated Clarity is branded for your company, including the domain name, login screens, and web application itself. Even the notifications are branded with your company's identity, and the in-app support chats are routed to your own customer support team.

Clarity Gateway can be white-labeled with a custom application name, logo, and company colors, providing an on-brand experience from the edge to the cloud.

Iron Pi devices can be manufactured with your company logo to integrate seamlessly with your overall hardware solution.
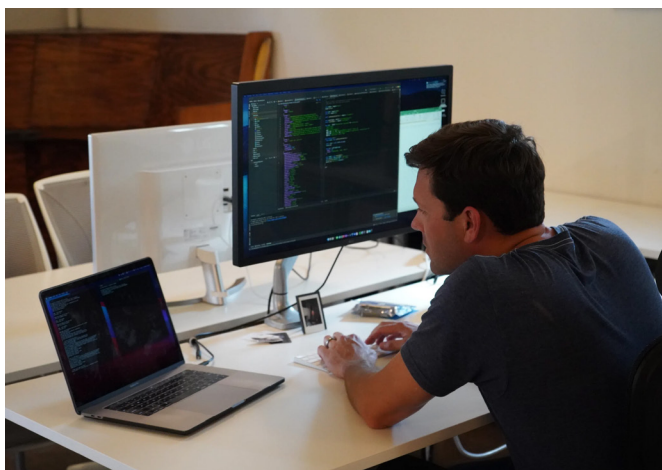
We provide a seamless branded experience to your customers, with faster time to market and less risk than developing your own system from scratch.

About JCore

JCore is a Texas-based company dedicated to creating radically simple industrial monitoring products.

Since our founding in 2014, we have made modern web, cloud, and embedded technology accessible to a wide range of equipment manufacturers and asset owners.

Because we are 100% employee owned and funded by operating profits rather than venture capital, we invest in each customer's long-term success instead of chasing arbitrary growth targets. With a relentless focus on product quality, we deliver a high-end customer experience while offering our employees a healthy work-life balance.

Our commitment to sustainable relationships doesn't end with our customers and employees. Our suppliers are vital to our success, and we strive to treat each of them with the highest level of fairness and respect.

jcore.io