

# Xtreme IO

A rugged closed loop controller, offering flexible IO configuration



Data to Cloud



Predix\* Ready



Edge Management

GE's Xtreme IO controller enables data collection in the toughest industrial environments. Based on proven aerospace technology, GE is able to offer a solution that is reliable, rugged and flexible.

Any single controller can be configured in software to perform a wide variety of IO and computing functions in different locations throughout a network of industrial controllers.

## Rugged

The GE Xtreme IO controller is built on aerospace technology, proven in-service on a range of civil and military aircraft. Aerospace demands a very high level of reliability in a wide range of environmental conditions. GE now offers these benefits for specific industrial applications.

GE Xtreme IO provides a rugged, ATEX and SIL3 compliant IO and computing platform.

## Flexible configuration

Software tools enable the customer to configure IO and data gateway functions, including secure data collection. Compatible with a range of industry-standard tools, Xtreme IO unlocks an unparalleled level of customer flexibility.

One part number, used in many locations across your plant, can be configured to perform different IO and computing tasks in each location, radically reducing installation and maintenance costs.

## Secure Data Collection

Data is a valuable asset in today's digital economy. Using a range of GE Power products, data can be securely gathered from industrial machinery or plants and transferred to the cloud.

Information can be collected across various industrial protocols and translated to a common format for distribution and analysis.

## Enabling Advanced Analytics

Leverage the power of the Industrial Internet by accessing real-time asset performance data and advanced predictive analytics. Armed with this valuable information, operators can optimize equipment uptime and OEMs can proactively maintain and service their equipment fleet, improving operations, growing service revenues, and winning new business.

Once machine data is collected and communicated via a Field Agent device, operators can run local analytic models to improve asset performance and predict failures before they occur, leading to reduced costs and new sources of revenue.

Field Agents can also run local analytics to improve the performance of OEM machinery locally.

## Remote Updates and Troubleshooting

Distributed assets are often located in hard-to-reach or distant locations. Getting to those assets can be quite challenging for an OEM or fleet operator, diverting valuable time and resources.

Field Agent devices are easy to manage with remote access. Updates and security patches can be deployed from a central location down to Xtreme IO without traveling to the device. Field Agents also enable remote troubleshooting of distant assets.

## A Range of Solutions

There are a range of Field Agent solutions designed for a variety of industrial applications.

Choose the right combination of form factor, ruggedization, protocol, tag capacity, connectivity, and controller functionality for your specific needs.

## Easy Installation and Connectivity,

Xtreme IO installation is simple and secure. It requires virtually no IT support from the end user. Once configured,

Xtreme IO devices can be installed and transmitting data to the cloud in a matter of minutes.



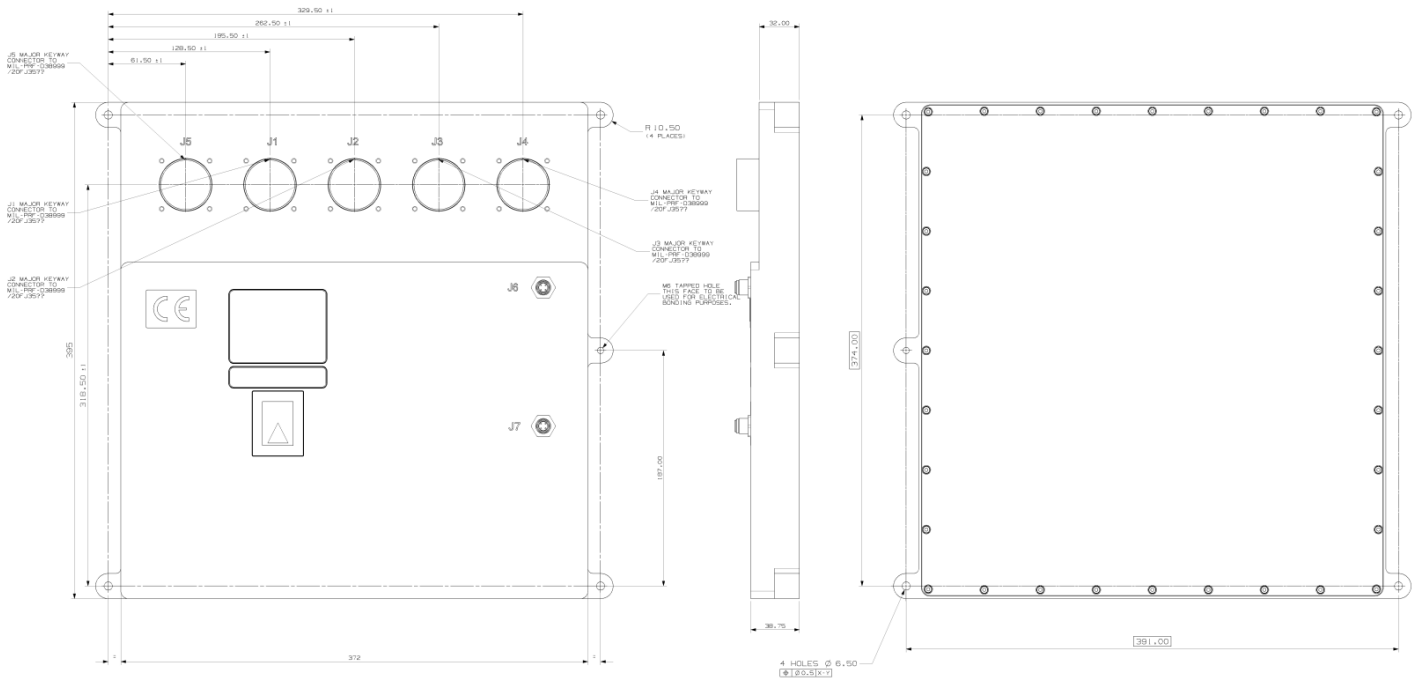
# Specifications

## Extreme IO Controller

- Temperature operating Range - 40 to 90°C
- Temp Storage -50 to 100°C
- Accreditation, CE, UL, ATEX Zone 1
- Vibration 40g 11ms
- Power supply range, 13-32
- EMC hardened
- Water resistant



| Interface Type                              | Unit Quantity*                    |
|---|-----------------------------------|
| Thermocouples                               | 18                                |
| RTD (PT100)                                 | 14 (including x1 low current RTD) |
| 4-20mA Input (with Excitation)              | 21                                |
| Speed Sensors                               | 4                                 |
| Overspeed Trip Output                       | 1                                 |
| Contact Inputs (isolated)                   | 28                                |
| Relay Drive (uses 23 of the contact Inputs) | 23                                |
| Dynamic Pressure                            | 3                                 |
| High Current Drives (+/- 120mA)             | 3                                 |
| Low Current Drive (+/- 20mA)                | 4                                 |
| CANOpen                                     | 2                                 |
| RS-422                                      | 1                                 |
| PROFINET                                    | 1                                 |



\*Typical values; specific constraints on IO combinations can occur