

***Extreme Telematics Corp.***

***5925 12th Street SE, Bay 14  
Calgary, Alberta T2H 2M3***

***Phone: (403) 290-6300  
E-Mail: [info@etcorp.ca](mailto:info@etcorp.ca)***

***[www.ETCorp.ca](http://www.ETCorp.ca)***

***EXTREME TECHNOLOGY FOR EXTREME CONDITIONS***

## ECONOMICAL WIRE REPLACEMENT

Designed to replace traditional wire and trenching with plug and play equipment, Iris is a cost-effective, easy to use system that safely enables up to 2 switches per node to be powered and relayed back to a panel-mounted gateway up to ½ mile away.

## INTERFACE FLEXIBILITY

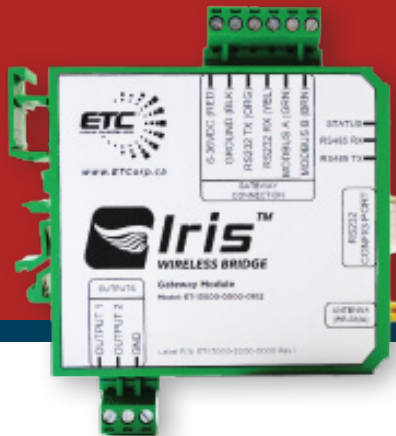
The current state of up to 2 switches and a Modbus device connected to each node can be read from the gateway using the integrated Modbus Slave interface. The Iris Gateway can connect to up to 240 nodes, offering ultimate versatility for a variety of system configurations and applications. Additional nodes are available with a range of sensor interfaces including Analog, HART, Modbus, RTDs and Turbine Meters. Configuring Iris is fast, easy and convenient with Vision software. Contact ETC for more information.

## SAFE OPERATION

DIN rail mounted Gateway modules are Class I, Div 2 certified for safe operation with your preferred control system. Nodes are Class I, Div 1 certified, providing full flexibility for a variety of safe installation locations.



## REPLACE TRADITIONAL WIRE & TRENCHING WITH **PLUG AND PLAY** EQUIPMENT.



## RUGGED & RELIABLE

Iris Wireless Bridge Nodes and Gateway are designed to reliably communicate from a distance up to ½ mile using omnidirectional weather resistant antennas. Designed for stable performance in even the most extreme conditions, Iris operates within a temperature range of -40°C to +60°C (-40°F to +140°F). The circuit board is conformal coated during manufacturing to prevent corrosion from chemicals and moisture in the atmosphere over

time, increasing longevity. In addition, Iris Nodes feature long-lasting, field replaceable lithium battery packs with an average life span of more than 4 years. A solar option is also available for Iris Nodes; this economical solar panel with integrated battery and charger removes the need for battery replacement and allows for operation with devices requiring higher power draw, such as ETC's Sasquatch plunger velocity sensor.



The Iris Wireless Bridge provides the ability to use Cyclops plunger arrival sensors in applications where wire is not an economically viable or easily attainable option. Installation is quick and easy; Simply terminate Cyclops to the Iris Wireless Bridge Plunger Sensor Node and connect the outputs on the Gateway to any standard control system.

To get more out of your Iris Wireless Bridge at a single well site, connect an additional switch to the second discrete input to wirelessly monitor pressures or tanks. For use in multi-well applications, connect up to two Cyclops sensors per Node, or use the Modbus interface with additional nodes to expand the number of linked devices.

# SPECIFICATIONS

## WIRELESS GATEWAY

<b>Supply Voltage</b>	6 V DC - 36 V DC
<b>Radio Power</b>	500 mW
<b>Switch Interface</b>	2 x Dry contact discrete outputs
<b>Communications Interface</b>	RS-485 Modbus RTU Slave
<b>Operating Temperature</b>	-40°C to +85°C (-40°F to +185°F)
<b>Certification</b>	Class I, Division 2, Non-incendive, Temp Code T5, Groups C&D
<b>Humidity</b>	0-100% condensing
<b>Antenna Type</b>	Omnidirectional
<b>Antenna Gain</b>	5 dB
<b>Receive Sensitivity</b>	-105 dB
<b>Range</b>	3 miles
<b>Frequency</b>	902-928 MHz license-free ISM band compliant with FCC Part 15
<b>Nodes</b>	Up to 240 separate nodes
<b>Networks</b>	Up to 64 separate networks
<b>Internal Diagnostics</b>	Line voltage, signal strength, error conditions event logging
<b>Enclosure</b>	DIN rail mounted

## PLUNGER SENSOR NODE

## ANALOG SENSOR NODE

<b>Sensor Power</b>	5.3 V or 7.6 V	13.5 V (4-20 mA) 12.5 V or 18.5 V (1-5 V)
<b>Sensor Interface</b>	2 x Dry contact discrete inputs	4-20 mA or 1-5 V
<b>Communications Interface</b>	RS-485 Modbus RTU Master	N/A
<b>Operating Temperature</b>	-40°C to +60°C (-40°F to +160°F)	-40°C to +60°C (-40°F to +160°F)
<b>Certification</b>	Class I, Division 1, Intrinsically Safe, Temp Code T5, Groups C&D	Class I, Division 1, Intrinsically Safe, Temp Code T5, Groups C&D
<b>Humidity</b>	0-100% condensing	0-100% condensing
<b>Transmit Power</b>	40 mW	40 mW
<b>Range</b>	1/2 mile	1/2 mile
<b>Antenna Type</b>	Internal weather resistant, omnidirectional	Internal weather resistant, omnidirectional
<b>Antenna Gain</b>	5 dB	5 dB
<b>Receive Sensitivity</b>	-109 dB	-109 dB
<b>Frequency</b>	902-928 MHz license-free ISM band compliant with FCC Part 15	902-928 MHz license-free ISM band compliant with FCC Part 15
<b>Connection</b>	1/2" NPT Port	1/2" NPT Port
<b>Power</b>	Lithium battery pack, field replaceable	Lithium battery pack, field replaceable
<b>Battery Life</b> *not applicable with solar option	4+ Years	1 - 10 Years
<b>Reporting Period</b>	1 second	User Configurable
<b>Internal Diagnostics</b>	Battery voltage, signal strength, error conditions	Battery voltage, signal strength, error conditions