



Beyond The Edge Networks

IE8550 Intelligent Edge Router/Gateway



BTE's IE8550 is the industry's only LTE gateway platform built specifically for rapid, end-to-end deployment of all industrial monitoring and control solutions at the network edge. The IE8550 provides the combined capabilities of a traditional PLC and SCADA server on a single communications platform with the ability to add additional third-party API. The BTE IE8550 is industrial rated hardware with a wide-range of legacy sensor and interface support. With the ability to add additional sensors to currently monitored or unmonitored devices to collect more data for better analysis and operational intelligence.

The IE8550 makes it easy to map Modbus data directly to OSIsoft PI Tags with its embedded FogLAMP software. The on-board, web-based Automation Control Application makes it a powerful and intelligent edge machine that enables it to bring alarms, reports and control all the way from the sensors, meters, PLC and RTU to your fingertips, on any mobile device, without the need for any custom software development all while reporting directly to the OSIsoft PI System.

LTE North America carriers with 3G fallback

- **Direct Modbus Data to OSIsoft PI Tag mapping with embedded FogLAMP.**
- **On-board automation , software PLC application. Edge Intelligence programmable**
- **Integrated interfaces for analog, digital, hex, and pulse information processing**
- **Modbus Client (master) and Server (slave) configurations**
- **Built-in digital input, digital output, and analog input**
- **Network connectivity over USB, Ethernet, RS232, RS485 and IO**
- **Turnkey Sensor Solutions for Condition Based Monitoring, Energy Management, Remote Asset Monitoring**
- **Dual Carrier SIM support for automatic failover**
- **GPS for asset tracking**
- **SMS/Email Alarms**
- **On-board dashboard display with gauges, indicators, graphs and charts**



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IE8550 Specifications



CELLULAR TECHNOLOGY	<p><u>4GLTE Category 3</u> 1900(B2), AWS(B4), 850(B5), 700(B13), 700(B17), 1900(B25)</p> <p><u>3G WCDMA</u> 2100(B1), 1900(B2), AWS 1700/2100(B4), 850(B5), 900(B8)</p> <p><u>3G CDMA 1xRTT/EVDO</u> 800(BC0), 1900(BC1), 800(BC10)</p> <p><u>GSM/GPRS Fallback</u> GSM 850, EGSM 900, DCS 1800, PCS 1900</p> <p>Multi-Carrier, Auto-Configuring Dual-SIM 2FF Automatic failover DL MIMO/Rx Diversity Support</p>
APPROVALS	FCC, IC, PTCRB Verizon, AT&T, T-Mobile, Sprint, US Cellular, Bell, Rogers, Telus
POSITION LOCATION	GPS, GLONASS
HOST INTERFACES	10/100 Ethernet (RJ45) 1 RS-232 (Terminal Block) 2 RS-485 (Terminal Block) 1 Full-Speed USB (Type A) 1 High-Speed Micro-USB OTG
INPUT/OUTPUT	1 Digital Input 1 Digital Output 1 Analog Input * Expandable with IE8812 I/O Module
MEMORY	128 MB DDR2 RAM 256 MB SLC NAND Flash 1 microSD Slot (Externally Accessible)
PLATFORM	Linux 3.16 Operating System Atmel ARM9 Processor BTetrak Cloud Service BTE Automation Application
POWER	Input: 9 - 24 VDC Power: 190mA (Typical)* *Ethernet not connected - varies with signal level
ENVIRONMENTAL	Operating Temperature: -30 to +70 °C Humidity: 90% Non-Condensing
DIMENSIONS	5.48L x 4.72W x 1.45H (inches)
WARRANTY/SUPPORT	3 Year Standard Warranty

ANALOG/PULSE/DIGITAL PROCESSING

Signal interfaces allow for quick integration of wet or dry contacts and solid state, 4-20mA, 0-5V, 0-10V signals.

MODBUS TCP AND RTU PROTOCOL

Supports both protocols and is configurable as a Client (master) and/or Server (slave)

AUTO-GENERATING GAUGES, INDICATORS AND GRAPHS

Gauges and indicators automatically generates based on the configured application. Logs and history also generate graphs and charts for quick analysis.

SMS AND EMAIL ALARMS/REPORTS

System status, dynamic I/O, MODBUS, and sensor information trigger notifications alerts and status changes

RS234/485 TO TCP/UDP PAD

Advanced TCP/UDP PAD for serial communications a wide range of legacy equipment.

CLOUD-BASED ASSET MANAGEMENT

Self-provisioning devices report to BTetrak for total visibility of assets; including their location and current status of the installation.