



Z4550 Industrial LTE Controller



Ctek's Z4550 is the only industrial LTE platform designed specifically for edge IOT implementations and intelligent gateway requirements.

The Z4550 offers the combined capabilities of the traditional PLC and SCADA server in a single, rugged, compact box that leads the industry with an integrated tool set for rapid, end-to-end deployment of all industrial monitoring and control requirements.

The Ctek Z4550 is an industrial rated hardware platform offering a wide-range of communications and control interfaces. Coupled with Ctek's on-board, web-based, Automation Control Application, it brings alarms, reports and control to your web browser, mobile device, or existing SCADA infrastructure without the need for any custom software development.

- **LTE coverage on all bands for North American carriers with 3G HSPA fall-back**
- **On-board, web-based automation application for developing monitoring and control solutions**
- **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, and multiple serial interfaces**
- **Dual-SIM support for automatic failover between SIMs (carriers)**
- **Automatic, SIM-based, carrier provisioning**
- **GPS for asset tracking**
- **SMS/Email Alarms**
- **On-board dashboard display with gauges, indicators, graphs and charts**

Developer Friendly Platform

The Z4550 runs a standard Linux operating system. Ctek also publishes an open development environment to facilitate quick low-level application development.



Monitor & Control Solutions

Z4550 Specifications



CELLULAR TECHNOLOGY	<p><u>4G LTE Category 6</u> Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 20, 25, 26, 29, 30, 41</p> <p><u>3G WCDMA</u> Bands: 1, 2, 3, 4, 5, 8</p> <p>Multi-Carrier, Auto-Configuring Dual-SIM 2FF DL MIMO/Rx Diversity Support</p>
APPROVALS	FCC, IC, CE, PTCRB Verizon, AT&T, T-Mobile, Sprint, US Cellular, Bell, Rogers, Telus
POSITION LOCATION	GPS, GLONASS
HOST INTERFACES	<p>10/100 Ethernet (RJ45) 1 RS-232 (Terminal Block) 1 RS-485 (Terminal Block) 1 Full-Speed USB (Type A) 1 High-Speed Micro-USB OTG</p>
INPUT/OUTPUT	<p>4 user configurable Digital/Analog Inputs (0-5v/4-20mA)</p> <p>2 Digital Outputs</p> <p>* Expandable with Z1201S I/O Module</p>
MEMORY	<p>128 MB DDR2 RAM 256 MB SLC NAND Flash 1 microSD Slot (Externally Accessible)</p>
PLATFORM	<p>Linux 4.xx Operating System Atmel ARM9 Processor Ctek Web Manger 2.0 Ctek SkyCloud Services Ctek Automation Application</p>
POWER	<p>Input: 9 - 24 VDC Power: 190mA (Typical)* *Ethernet not connected - varies with signal level</p>
ENVIRONMENTAL	<p>Operating Temperature: -30 to +70 °C Humidity: 90% Non-Condensing</p>
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 to alert of installation status.

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 Ctek's SkyCloud for total visibility of assets; including their location and current status of the installation.