STRIDE communication products provide reliable connectivity to your industrial controllers and field devices. Whether it’s providing secure remote access through the StrideLinx platform, Ethernet connectivity through STRIDE unmanaged switches, or serial connectivity with our Modbus gateways and serial converters, you’ll find STRIDE offers the industrial performance that you can count on.

### Practical Control and Data Communications

**IoT Solutions**
- Secure VPN
- Remote Access
- Cloud Data Logging

**Industrial Ethernet Switches & Media Converters**

**MQTT Gateway**

**Media Converters**

**Communication Cables & Accessories**

**Industrial Grade Ethernet Cables**
- Cat6A Ethernet Patch Cables
  - RJ45 male connectors on both ends, with lengths up to 14 ft.
  - Support transmission speeds up to 10 Gbps full duplex

- Cat5e Ethernet Patch and Crossover Cables
  - RJ45 male connectors on both ends, with lengths up to 50 ft.
  - STP - shielded twisted pair (with overall foil shield)
  - Support transmission speeds of 10 / 100 / 1000 Mbps

- TPE (thermoplastic elastomer) jacket for harsh industrial applications

Coordinated control
Communication links between controllers can be used to create robust, modular control systems. Sharing data between separate operations enables each local controller to better contribute to the system’s overall performance. Whether separated by feet or by miles, your controllers can access what’s going on in the world around them.

Data sharing
Run a more effective business by making use of the valuable information within your process controllers. The business needs to know what manufacturing is doing whether you call it ERP, MES, SCM, or just plain common sense.

Remote support
Remotely access machine or process controllers for troubleshooting, configuring, updating or monitoring the system. Whether it’s your production facility or your controller in a customer’s facility, having convenient and secure remote access ensures maximum production with minimal support costs.

Commercial Grade vs. Industrial Grade
Before you take a risk with commercial-grade products to save a few bucks, ask yourself how much just one field failure will cost you in service time, reputation, and money. Communication products not designed to operate in the heat, cold, or humidity of an industrial site or products not ruggedized for power spikes and vibration don’t have to completely quit working to cause headaches. Communication products, along with cables and connectors, are notorious for causing those irritating intermittent control system bugs that inevitably absorb loads of troubleshooting man hours over a few dollars in parts. Neither your customer nor your family wants you onsite resolving a late night or weekend communication link issue.

Sometimes commercial grade will do, but for those times when you and your customer need rock-solid reliability, AutomationDirect has the best values in industrial communication products.

Service, monitor and troubleshoot remotely from multiple devices
Cloud connect any of your Ethernet-ready devices at a price even the smallest OEM, machine builder or system integrator can afford! With StrideLinx you get secure, reliable access over the “industrial internet” to your field devices for the remote viability needed to compete in today’s connected world.

Make any device an edge device
The STRIDE Pocket Portal is a simple, low-cost cloud data logging and storage solution that will gather and store data directly to the cloud from any device including analog sensors, actuators, and Modbus-capable controllers.

No matter the industry, STRIDE IoT solutions can provide the remote access and cloud data you need for less!

- OEM/Machine Builders
- Oil and Gas
- Package/Material Handling
- Power/Utilities
- Water and Wastewater
- Food and Beverage
- Building Automation
- Agriculture

The possibilities are endless!
Industrial Strength Ethernet

STRIDE is our line of industrial grade Ethernet switches and media converters. Designed with our PLC, HMI, and drive customers in mind, STRIDE Ethernet switches are specifically built for industrial environments. With a STRIDE industrial Ethernet switch on an isolated control LAN, you can reduce data collisions that slow down your network. Install STRIDE switches and your Ethernet control network will maintain more consistent cycle times even under heavy I/O and data exchange.

Extreme Temperatures

For industrial applications where temperatures change from freezing to sweltering heat, the STRIDE line offers Ethernet switches designed for standard industrial environments, as well as the most extreme industrial environments. The rugged metal housing models offer superior EMC performance and corrosion-resistance while also allowing you to choose various mounting methods for your application.

PoE+ and Fiber Optic Support

STRIDE offers models with a variety of fiber optic connections and models with PoE+ capability. PoE+ models provide both power and Ethernet communication to connected devices allowing even more savings in your network design. The STRIDE PoE+ switches will auto-detect the presence of a PoE enabled device and provide up to 120W of DC power along with Fast or Gigabit Ethernet communication speeds to the powered device. Fiber optic cables are immune to electrical and magnetic interference and cannot be damaged by induced voltage transients. Fiber optic cabling not only enhances reliability, it also greatly increases network distances. Select STRIDE Ethernet switches provide ST, SC, or SFP fiber port options.

Washdown Applications

STRIDE IP67 rated unmanaged switches provide dependable communication and protection from water intrusion. Perfect for food and beverage or any other application that requires regular washdown of equipment.

Features

Advanced Hardware
- All copper ports are auto-detecting, auto-crossover and auto-polarity
- Redundant power inputs with industrial surge, spike, and reverse power protection
- Fiber optic ports available on certain models
- SFP transceiver modules on selected models offer additional fiber options

Real-time Performance
- PoE+ & Gigabit Ethernet options available
- Models with up to 16 ports
- Store and Forward wire speed switching - no delays
- Full-duplex operation with flow control (no collisions!)

True Industrial Design
- UL, CUL, CE
- Hasler rated for Class 1, Div 2
- DIN rail or panel mount options
- 12, 24, 48 VDC or 24 Vac input power
- 5 year warranty on SE3 series
- IP67 (washdown) rating available with EN50155 & EN60521 approvals

Energy Efficient Ethernet (EEE)

The STRIDE SE3-SW5UG-1P-T switch has been designed to meet the IEEE 802.3 Ethernet standard. This standard’s primary objective is to curtail power usage during periods of reduced data activity or idleness. Established in 2010, the IEEE 802.3 standard has been seamlessly integrated into diverse Ethernet hardware components, including network interface cards, switches, routers, and other integral networking equipment.

By dynamically adapting power consumption according to actual data traffic demands, EEE can enhance the energy efficiency of network devices, resulting in notable energy savings and lowered operational expenses.

Connections you can rely on

STRIDE unmanaged switches deliver reliable Ethernet connections between various control devices including PLCs, HMIs, VFDs, and many others. Featuring 10/100/1000 Mbps speeds, a small form factor, low power consumption, supreme port resilience to electrical noise, and a redundant power input with alarming to notify of power failure, STRIDE Ethernet switches will keep your system components online and communicating for years to come.

Power Boost Technology

Typical POE products require a 48 VDC power supply. STRIDE POE+ switch include Power Boost Technology that allows the switch to be powered by 24 VDC but still power devices at standard POE voltages. This removes the need to have multiple power supplies, resulting in more cost savings.

Power Consumption (W)

<table>
<thead>
<tr>
<th>Without EEE</th>
<th>With EEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>19W</td>
</tr>
<tr>
<td>10</td>
<td>12W</td>
</tr>
<tr>
<td>15</td>
<td>12W</td>
</tr>
</tbody>
</table>

*actual power savings may vary
**STRIDE MQTT Gateway**

The MQTT protocol is ideal for applications where bandwidth and available power are a concern. It’s highly efficient with minimal overhead and performs well in unreliable networks making it a primary protocol for the Industrial IoT. The STRIDE MQTT gateway converts Modbus RTU/TCP signals to MQTT in order for Modbus devices to easily communicate with MQTT/IoT capable networks.

- **Features:**
  - Wired or Wi-Fi models available
  - Ideal for IoT/cloud-based data collection systems
  - Compatible with various MQTT brokers including AWS, Mosquitto and more
  - Provides bidirectional communication between Modbus capible field equipment and Cloud software platforms
  - Converts Modbus RTU to MQTT with SSL/TLS client certificate authentication

**Ethernet vs. Fiber Optic**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Ethernet</th>
<th>Fiber Optic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>Most commonly 10/100/1000 Mbps</td>
<td>Average speed is around 1000 Mbps but much higher speeds possible</td>
</tr>
<tr>
<td>Distance</td>
<td>Up to 100 meters (328 feet) without a repeater</td>
<td>Up to 2 kilometers (1.2 miles) without a repeater</td>
</tr>
<tr>
<td>Immunity to interference</td>
<td>Susceptible to electromagnetic interference (EMI) and radio frequency interference (RFI)</td>
<td>Immune to EMI and RFI</td>
</tr>
<tr>
<td>Cost</td>
<td>Less expensive</td>
<td>More expensive</td>
</tr>
<tr>
<td>Installation</td>
<td>Easier to install</td>
<td>More difficult to install</td>
</tr>
<tr>
<td>Durability</td>
<td>More durable</td>
<td>Less durable</td>
</tr>
<tr>
<td>Compatibility</td>
<td>Compatible with most devices</td>
<td>Not compatible with all devices</td>
</tr>
<tr>
<td>Construction</td>
<td>Copper wires</td>
<td>Glass or plastic fibers</td>
</tr>
<tr>
<td>Security</td>
<td>Less secure</td>
<td>More secure since it’s difficult to tap into</td>
</tr>
</tbody>
</table>

**Configuration through the convenient web interface!**

- **Wired MQTT Gateway**
  - $275.00
- **Wireless MQTT Gateway**
  - $279.00

**STRIDE Ethernet/Fiber Media Converters**

STRIDE Ethernet media converters easily convert signals transmitted using Ethernet-over-copper to/from signals transmitted over fiber optic cabling. Fiber cabling offers many benefits including immunity to electrical noise interference and greatly increased transmission distances due to minimal signal attenuation. Ethernet media conversion is done using the built-in fiber ports on STRIDE Ethernet switches or with the optional SFP plug-in transceiver module.

**Features:**
- Multi-mode SC 100FX or ST 100FX fiber optic connections available
- Redundant power inputs with surge and spike protection
- Supports Store & Forward wire speed switching and full-duplex with flow control
- DIN rail mounting
- UL, CSA (CUL), & CE

**Features:**
- **Wired or Wi-Fi models available**
- **Ideal for IoT/cloud-based data collection systems**
- **Compatible with various MQTT brokers including AWS, Mosquitto and more**
- **Provides bidirectional communication between Modbus capable field equipment and Cloud software platforms**
- **Converts Modbus RTU to MQTT with SSL/TLS client certificate authentication**

**Ethernet/Fiber Media Converters starting at:**
- Wired Ethernet Converter $235.00 (SE-MC2U-SC)
- Wireless Ethernet Converter $279.00 (SGW-MQ1611-WF)