

# Modular design that delivers flexibility

## TAC I/NET

Communications Controllers



Make the most of your energy

**Schneider**  
Electric

# Improve the reliability of data communications



## Reliable, modular and cost-effective solutions for network communications

Schneider Electric's communications controllers provide cost-effective, high-speed connection between commercial WANs, host PCs and the TAC I/NET™ controller environment, with reliable, modular solutions for both TAC I/NET Seven and commercial LAN/WAN installations.

Consisting of the NetPlus™ Router, the Fiber Optics Interface (FOI) and the Series 7800 Taps, Schneider Electric's family of communications controllers delivers the versatility and performance you need to manage even the most diverse, globally networked systems.

### Modular design, robust features

Schneider Electric network controllers provide modular solutions for TAC I/NET and standard commercial LAN/WAN systems including:

- Distributed networks
- Peer-to-peer networks
- Token passing networks
- Collision detection networks

Schneider Electric controllers support telephone communications via voice-grade, leased lines, dedicated lines, and modem.

Communications controllers also make it possible to locate Taps, FOIs and NetPlus Routers anywhere in the TAC I/NET Seven architecture, which helps flatten the system architecture.

User manageable limits on message distribution and comprehensive network management tools ensure that Schneider Electric communications controllers are readily accepted by IT departments and network managers.

Operators have the ability to direct alarms and messages to specific workstations throughout the TAC I/NET Seven system. During normal hours, for example, messages and alarms may be monitored through the maintenance department. After hours, or under unusual conditions, it may be desirable to redirect all alarms or only certain critical alarms to the security guard's PC. Alarms may be selectively routed to a number of monitoring PCs according to user-defined parameters.

### Reliability

Schneider Electric controllers offer important features that improve the reliability of data communications.

Alarm, message and transaction buffering -with onboard battery backup protects data in the event of power loss. Automatic token spawning and reconfiguring allows the token passing LAN to detect when a controller drops offline and to automatically reconfigure the LAN to compensate. When the fault condition clears, the LAN automatically reconfigures itself accordingly.

For a more robust and reliable network, fiber optic cable can be incorporated to help the network withstand transient electrical interference and support high data rates over long distances.



### NetPlus router

The NetPlus Router is ideal for bridging commercial networks, enabling TAC I/NET Seven to communicate over a customer's commercial LAN/WAN system. NetPlus Router enables the TAC I/NET Seven architecture to span up to 6,400 facilities anywhere in the world, and gives operators high-speed, continuous access and presentation of facility information.

NetPlus Router converts the TAC I/NET Seven controller LAN to a LAN/WAN environment and supports all standard communications media including: thicknet coax, thinnet coax, and 10BASE-T. And it simplifies network architecture by connecting the controller LAN directly to the Ethernet.

With remote pre-configuration, configuration, and management capabilities, NetPlus Router minimizes the local configuration effort.

### Fiber optics interface

Schneider Electric's Fiber Optics Interface (FOI) allows your network to leverage the benefits of fiber optics, especially for multi-building facilities where high data rates are required over long distances or where maximum EMI protection is needed to sustain critical communications links.

The FOI converts hard-wired, half-duplex RS-485 network communications into an optically-isolated fiber environment at data rates from 9,600 baud to 38,400 baud. The FOI also supports an optional "counter-rotating ring" configuration. The FOI can also be used as signal repeater to increase distances between FOIs.

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On October 1st, 2009, TAC became the Buildings Business of its parent company Schneider Electric. This document reflects the visual identity of Schneider Electric, however there remains references to TAC as a corporate brand in the body copy. As each document is updated, the body copy will be changed to reflect appropriate corporate brand changes. All brand names, trademarks and registered trademarks are the property of their respective owners.

### 7800 Series taps and printer tap

The 7800 Series Taps provide high-speed communications between controllers, buildings, service centers and PC workstations. The throughput and response times of the 7800 Series Taps are superior to conventional systems, ensuring fast, reliable performance for:

- Auto-dial/Auto-answer
- PC connection to TAC I/NET Seven
- Leased-line connections

Schneider Electric's 7800 Series Taps deliver event or alarm message outputs without the cost of an additional PC. With their modular design, Schneider Electric Taps offer an easy, cost-effective means to scale communication requirements.

For systems that do not require a local PC for logging alarms, messages, or transactions, the 7810 Printer Tap provides a convenient alternative. The 7810 Printer Tap connects directly to the controller LAN and can be configured to output user-defined data to a serial printer.

### Schneider Electric communications controllers

- Link to commercial WANs, host PCs and TAC I/NET Seven controllers
- Cost-effective, high-speed connections
- Reliable, modular architecture
- Telephone communications support
- Fiber optic capability
- Data protection via buffering and battery backup

Schneider Electric communications controllers deliver the industry-leading TAC I/NET quality and performance customers have come to expect, with features and functions to meet every need.

Contact your Schneider Electric representative or visit our website at [www.schneider-electric.com/buildings](http://www.schneider-electric.com/buildings) to learn more.