

Special Specification 6429

Ethernet Switch



1. DESCRIPTION

Furnish a Cisco IE3400 or approved equivalent Ethernet Switch, 8-port RJ45 expansion module, and power supply (AC) module for the Ethernet Switch. Furnish the Ethernet Switch set up with the City of Grapevine's existing Cisco Network Essentials account.

2. MATERIALS

Provide all materials necessary for the Ethernet Switch installation. All materials provided by the Contractor must be new.

3. CONSTRUCTION

- 3.1. **Furnish.** Furnish ethernet switch for equipment cabinets in accordance with this Item and details and dimensions as shown on the plans or as directed. Maintain safe construction practices.

Configuration, IP schema programming, integration and installation will be completed by the City of Grapevine. Deliver the Ethernet Switch to the City's IT Department before installation so all configuration and programming can be completed. Call (817) 410-3314 48 hr. before delivery of the Ethernet switch to the City.

Prevent damage to all components. Any unused or removed material associated with the Ethernet Switch will remain the property of the City and must be delivered to a designated site. Accept ownership of unsalvageable materials and dispose of in conformance with federal, state, and local regulations.

Equipment to be furnished at each traffic signal cabinet shown on the plans may include, but not be limited to, the following:

- Ethernet Switch, provided by the Contractor,
- small form-factor pluggable (SFP) transceiver with a minimum 10km optical distance compatible with Ethernet switch, provided by the Contractor,
- expansion modules, including power, provided by the Contractor,
- cabling and connectors from power source to Ethernet Switch connection point as specified by the manufacturer, provided by the Contractor,
- cabling and connectors from telecommunications source to Ethernet Switch connection point as specified by the Ethernet Switch manufacturer when required, provided by the Contractor, and
- communications as shown on the plans.

- 3.2. **Working Drawings.** Before ordering equipment, submit electronic PDF of the working drawings for attachment of each Ethernet Switch inside the traffic signal cabinet. Show the details of any additional brackets, connections, and methods of attachment.

- 3.3. **Testing.** Testing of the Ethernet Switch is for the purpose of relieving the Contractor of maintenance of the system. Contractor will be relieved of the responsibility for maintenance of the Ethernet Switch in accordance with Item 7, "Legal Relations and Responsibilities," after all testing is successfully completed.

The City will conduct approved continuity, stand alone, and Ethernet Switch tests on the installed field equipment with central, remote, and laptop equipment.

- 3.4. **Warranty.** Extend the standard manufacturer warranty of provided equipment directly to the City.

4. MEASUREMENT

This Item will be measured as each Ethernet Switch system furnished.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Ethernet Switch (Furnish Only)." This price is full compensation for furnishing the Ethernet Switch; furnishing new mounting hardware; storing the Ethernet Switch when required; replacement and repair of damaged components; disposal of unsalvageable material and for all manipulations, labor, tools, working drawings, equipment, incidentals, and warranty.