



Specification for Traffic Signal Controller Monitor Unit (CMU) & Malfunction Management Unit (MMU)

City of Mesa Transportation Department

Traffic Engineering
Intelligent Transportation Systems Group (ITS)

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Specifications and Standards incorporated in this document

1. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, TRAFFIC CONTROL SYSTEMS, AND NEMA STANDARDS PUBLICATION: TS1-1989.
2. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, TRAFFIC CONTROL SYSTEMS, AND NEMA STANDARDS PUBLICATION: TS2-2003.

Documentation

The City reserves the right to reject traffic signal control equipment and auxiliary equipment items in which the manufacturer of such items does not have at least one million dollars of product liability insurance.

All bidders shall include with their bid submittal technical information necessary to fully describe the proposed equipment.

At the time of delivery, the supplier shall furnish fifteen (10) copies of the programming and operation manuals and 2 copies of the repair documentation for the equipment. The documentation shall include an itemized price list for each type of equipment, their subassemblies, and their replacement parts. This documentation shall also be provided on compact disk (CD-ROM) in Microsoft® Word or RTF format for text and AutoCAD® or DXF format for drawings/diagrams.

A permanent label with the serial number and date of manufacture shall be attached to each individual unit.

A list of serial numbers and manufacturing dates shall be provided with each shipment.

Warranty Statement

WARRANTY COVERAGE

The supplier of equipment shall warranty their product to be free from defect in design and operation and that it meets all the requirements of this specification and those incorporated in this document.

LENGTH OF WARRANTY

The term of warranty shall be a minimum of one (2) years from date of shipment. Vendor shall state length of warranty in writing.

PARTS AVAILABILITY

The supplier of equipment shall be able to provide replacement parts for a minimum of five (5) years after the warranty expires.

REPLACEMENT COVERAGE

All units shall be covered as follows: if a malfunction occurs during the warranty period, the supplier shall, within two (2) weeks after notification, furnish a like unit, module, or auxiliary equipment for use while the warranted unit is being repaired.

RELIABILITY CLAUSE

While under warranty, the isolation and repair of any unit malfunction shall be the responsibility of the supplier. Any unit experiencing a total of three failures that has twice been returned to the supplier for repair shall be replaced with a new unit of the same type at no charge to the City. The replacement unit's warranty shall be that of a new unit.

NOTE: Malfunctions do not include damage caused by lightning, power surges, negligence, acts of God, or use of equipment in a manner not originally intended by its manufacturer.

SHIPPING & HANDLING

During the warranty period shipping shall be handled as follows: The City of Mesa will pay for shipping the unit to the vendor and the vendor will pay for return shipping the repaired unit to the City.

Conflict Monitor Unit (CMU) Types

All MMUs shall be NEMA TS1 Type 6. EDI SSM-6LE-IP or exact approved equal *equipped with integral Ethernet Port.*

Malfunction Management Unit (MMU) Types

All MMUs shall be NEMA TS2 Type 16. EDI MMU 16LE-IP or exact approved equal *equipped with integral Ethernet Port.*