



**NEMA TS2 Bus Interface Unit Tester  
MODEL BIUT 800  
Rev 2.0**

**1. BIU Tester General**

The NEMA TS2 BIU tester is designed to run a complete set of standards-based tests on a NEMA TS2 Bus Interface Unit (BIU). This set of tests will confirm the performance of the BIU to the timing and functions defined by the NEMA TS2-1998 standard. The tester shall include all hardware, firmware, cabling, and accessories required to test a NEMA TS2 Bus Interface Unit and save a test report to the tester's memory. The tester shall be capable of downloading saved test reports, in ASCII character format, via RS232, to a compatible computer provided by the operator.

**2. BIU Tester Description**

**BIU Connections**

The tester shall provide the proper female DIN connector and guides to connect with the BIU backplane connector, providing power and discrete I/O connections. The tester shall provide the 15-pin D-sub cable to interface with the SDLC connector on the front panel of the BIU. Both the discrete I/O and SDLC communications shall be tested by the tester.

**Serial Data Port**

The tester shall provide a standard 9-pin D-sub RS232 port for serial data transmission of test reports to the compact printer or a compatible computer provided by the operator.

**Power Requirements**

The tester shall operate on 120 VAC 60 Hz power. The tester shall have adequate over current protection.

**Field Printer**

The tester manufacturer shall make available a compact printer which fits inside the tester enclosure which can be used to print test reports in the field.

**Operator Interface**

The tester shall include a multi-function keypad which allows operator input of BIU model, serial number, comments, and operator ID which are then saved by the tester, along with the time and date and test results to form a test report. The tester shall also include a multi-line alphanumeric display to prompt the operator during the test setup and provide feedback for manual data entry.

**Physical**

The tester shall be housed in an impact-resistant suitcase-style enclosure that contains and protects all components of the tester. The enclosure shall contain the tester, power cord, compact printer, printer cable, SDLC communication cable, and Operating Manual. The tester enclosure shall not exceed 15 in. X 20 in. X 5 in. The weight of the tester shall not exceed 14 lb.

**Warranty**

The purchaser's interest in the tester shall be protected by a one-year limited warranty on parts and labor. The continuing utility of the tester shall be further protected by the availability of repair, update, recalibration, and extended warranty services from the manufacturer.