PART E

SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. GENERAL

E1.1 These Specifications shall apply to the Work.

E2. GOODS

E2.1 The Contractor shall supply Wireless Contact Closure Transceiver in accordance with the requirements hereinafter specified.

E2.2 The following shall be the minimum common requirements.

E3. WIRELESS CONTACT CLOSURE TRANSCEIVER

(a) Shall operate in the license-free, Spread Spectrum band (902-928 MHz), utilizing Frequency Hopping technology

(b) Shall utilize 139 user-selectable channels, with 62 available hopping sequences, (2 shall be non-overlapping)

(c) Shall be completely configurable via included software

(d) Shall have software features providing “remote programming, remote maintenance, and spectrum analyzer”

(e) Shall have software configurable I/O Data mapping

(f) Shall provide Bi-directional Contact Closure transmission with 8 inputs and 8 outputs. (8 I/O optional)

(g) Shall provide ‘real time’ contact closure transfer (maximum 20 mSec. End-to-End latency on all inputs)

(h) Shall have LED indicators for PWR / RF Link Status, and Channel / Zone activity

(i) Shall have an operating temperature of -40 to +80 degrees C

(j) Shall have a Receiver Sensitivity of -110 dBm @ 10^{-6} BER

(k) Shall operate with voltages between 6 VDC and 30 VDC, with a typical current draw of <100mA

(l) Shall have a radio sleep mode with a maximum current draw of <1uA

(m) Shall be programmable for RF output levels of 1 mW, 10 mW, 100 mW or 1 Watt

(n) Shall provide 16-bit CRC error checking

(o) Shall provide Forward Error Correction (FEC) as standard

(p) Shall operate as Master, Remote, Repeater

(q) Shall operate in a Multi-Point to Multi-Point configuration

(r) Shall be available as Shelf Mount Transceiver

E3.2 SHELF MOUNT UNIT DETAILS

(a) Shall have quick release terminal blocks for all connections

(b) Shall have Modular Jack Programming Port

(c) Shall not exceed 9” L x 5”W x 2”H

(d) Shall have RP TNC-F antenna connector.

(e) Shall be supplied with 120 VAC Wall Cube CSA/UL Power Supply

(f) Shall have RSSI signal strength indicator LEDS

(g) Shall have built-in 10A SPST relay outputs

(h) Shall accept standard TTl, CMOS or 0 to 24V (Ground activated) signals on Low Voltage signal input port

(i) Shall accept direct 110 VAC utility power on High Voltage signal input port

E3.3 RF COAX JUMPER CABLE

(a) Shall be 6 feet long.

(b) One end shall connect with the RP TNC-F antenna connector on the transceiver.

(c) The other end shall have a type N male connector on it suitable for connection with a lightning protector with a type N female connector on it.

(d) The RF coax cable shall be of a type with low enough line losses to be suitable for 920mhz radio applications.

E3.4 DOCUMENTATION

(a) Complete instructions for hardware installation, programming and system commissioning shall be included.

E3.5 SOFTWARE

(a) Configuration software shall be supplied at no extra cost with products.

E3.6 WARRANTY

(a) Two years from the date of factory shipment, return to factory.

E4. DELIVERY

E4.1 Goods shall be delivered and delivered within thirty (30) days of award, FOB destination, freight prepaid.

E4.2 Goods shall be delivered between 8:30 a.m. and 4:30 p.m. on Business Days