



MODBUS ADAPTER UNIT

APPLICATIONS

The MODBUS ADAPTER UNIT (MAU) is to provide tank parameter data measured by SBEM float gauges /Servo Gauges /Hybrid / based systems &/or Smart Tank Data Transmitters (STDT) with other supervisory systems eg. SCADA/ DCS GATEWAY/ LOADING RACK COMPUTER OR SUPERVISORY COMPUTER in RTU MODBUS format.

MAU is control room (safe area) mounted instrument which accepts tank parameter data directly from field bus/ buses & provides the same on RS 485/ RS 232 port with MODBUS remote terminal unit (RTU) protocol output on MODBUS slave driver.

ENCLOSURE:

The MODBUS unit is made of powder coated enclosure with 4 welding mounting brackets for mounting of MAU. This unit can be mounted on wall or inside of panel in a control room.

FEATURES

- High Reliability and Extended Life
- Low Cost
- No maintenance

SPECIFICATIONS

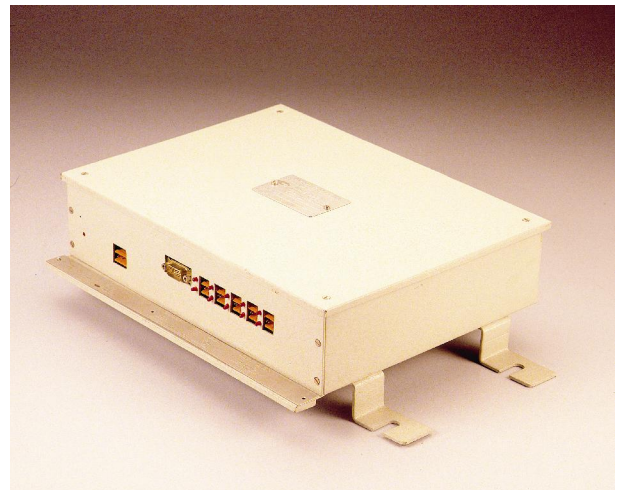
Power : 110 /230 VAC \pm 15%, 50Hz, 2VA

Field devices : Smart Tank Data Transmitter / Servo Gauge/ Hybrid Servo Gauge

Output Port :
◆ Communication : Serial
◆ Type : EIA RS 232C, full duplex, no handshaking OR EIA RS 485, Half duplex, no handshaking (optional)
◆ Baud rates : selectable 1200/ 2400/ 4800/ 9600
◆ Data protection : Cyclic Redundancy check (CRC)
◆ Protocol : Modbus RTU

Protection :
◆ Optoisolators provide isolation between input /output terminals & internal circuitry.
◆ Surge protection using Metal Oxide Varistors.

Environment :
◆ Operating temperature 0 to 55°C.
◆ Relative humidity 95% max., Non-Condensing
◆ Storage temperature: -40 to 85°C



Mounting : Wall / panel (inside) safe area Mounting.

Construction : Powder coated enclosure

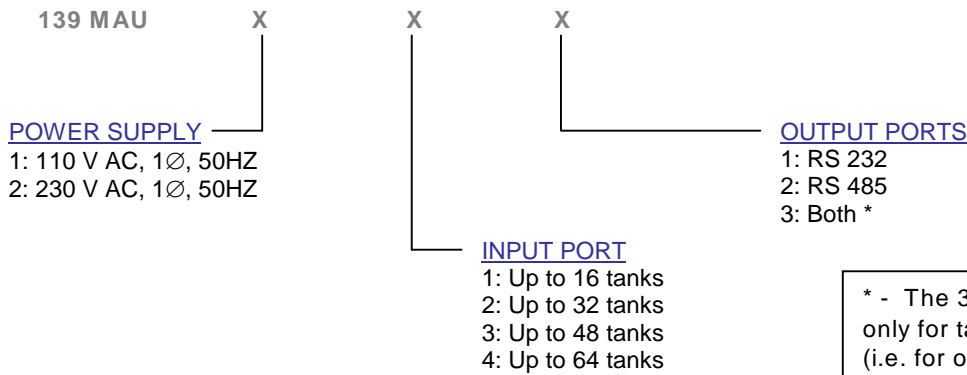
Terminations :
Suitable for 2.5mm² conductor cable.

Cabling :
From ITU in control room : 2 core X 1 mm² Copper conductor cable PVC insulated.

From Signal Junction Box (JBS) in field : 1 pair X 1mm². Twisted pair shielded copper PVC insulated armored cable.

Input Port : 1/2/3/4
◆ Communication : Serial
◆ Type : EIA RS 485, Half Duplex, No Handshaking.
◆ Baud rate : 1200/ 2400/ 4800/ 9600
◆ Protocol : SBEM proprietary.
◆ Data protection : longitudinal parity check & vertical checksum
◆ No. of tanks : Maximum 64 tanks –16 field devices on one port X 4 port

ORDERING INFORMATION:

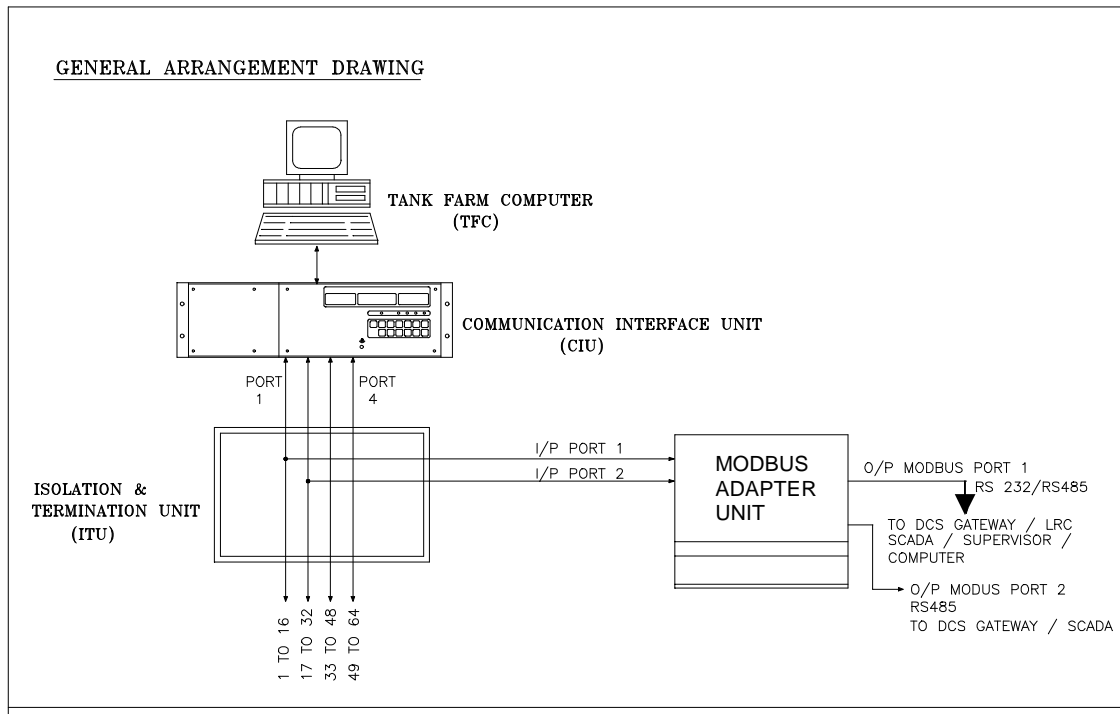


* - The 3rd option in output ports is valid only for tanks upto 32 nos. (i.e. for options 1 & 2 of input ports)

ORDERING EXAMPLE: 139 MAU 2 2 3

MODBUS Adapter Unit with 230V AC, single phase, 50 Hz power supply, with 2 input ports i.e. for 32 tanks and both output ports – RS 232 & RS 485.

GENERAL ARRANGEMENT



*** Continuous developments may necessitate various changes without prior notice.

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