t. 0,2,3,5,7 or 8 I/O slot wall mount & 19" frames

u. Expansion frames allow up to 110 I/O modules in a single RTU.

v. Redundant CPU and power supply

w. Single and double density I/O modules

x. Mixed analog input and output modules

y. Hot Swap I/O replacement

z. Wide operating temperature range -40 to +70 ºC

aa. NEMA 4 / IP66 Housing, 40 x 40 cm and 50 x 50 cm

bb. Two-way/trunking/ digital radio models

cc. AC and DC controlled power supply

dd. 6.5 or 10 Ah Backup battery, smart battery charger

ee. GPS and NTP for time synchronization

ff. System building tool for configuration and programming

gg. Remote firmware and program download

hh. Compatible with MOSCAD family of RTUs

ii. Multiple Protocol Support: Modbus, DNP 3.0, DF1, IEC 60870-5-101

jj. All I/O signals shall be buffered,

kk. The CPU shall contain a function block for accumulated Flow, Pump Running Hours, Pump Number of Starts

ll. The CPU shall contain a function block for self-battery test in daily condition

mm. Digital I/O signals shall have LED indicator

nn. The RTU program shall be able to be uploaded from RTU to Laptop in full editable condition

1.3.23.2 RTU Hardware

A. RTU will be the main device used to control loops in each RTU process area. Each RTU shall be able to receive analogue and digital inputs from the field, perform input signal processing and alarm checking, perform algorithms control, and output to valves and other actuators.