

Annexure-1

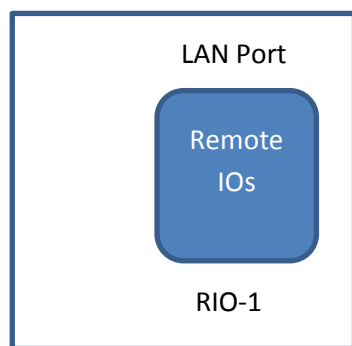
Control Panel for Remote Operation of Motorized Valve

Sl.No	Panel Details	Description	Vendor Compliance
1	AC Input Voltage (1Ph, 2 Wire)	230V $\pm$ 10%, 50Hz $\pm$ 5%	
2	Mounting	Floor mounting, Indoor Type	
3	Cable Entry	Bottom	
4	Paint of Inside & Outside of Cabinet	Shade RAL 7032	
5	Steel Structure frame	2mm	
6	Equipment mounting inside Panel	Din-Rail Type	
7	Dimensions		
7.1	Height (min, max)	500mm , 650mm	
7.2	Width (min, max)	500 mm, 650 mm	
7.3	Depth (min, max)	300mm, 350 mm	

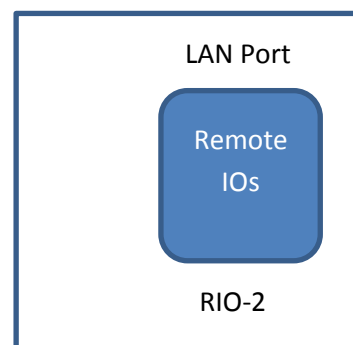
S.No	Minimum Bill of Material (BOM)	Description	Qty	Vendor Compliance
1	SMPS	Input:240V AC Output: 24V DC, 5A	2	
2	Remote IOs (6DI & 6DO), Modbus over Ethernet, with peer to peer communication	MOXA Iologik 1214 OR As per Annexure-3	4	
3	Multifunction Meter shall be 96X96 mm, Class 0.5 accuracy, 3P4W, 5A, Modbus Communication	SEMS Make	2	
4	LED Indication			
	Incoming Supply ON	230V AC	1	
	Valve-OPEN	230V AC	4	
	Valve-CLOSE	230V AC	4	
5	Protection			
	MCB/Fuse on Input Supply	230V, 5A	Min 2	
	Fuse for Valve	230V, 2A	Min 6	
	Fuse for Multifunction meter PT	230V, 2A	Min 8	
6	Auxiliary Contactor	Input: 230V AC 4NO Potential Free	Min 16	

		Contact, 5A		
7	Local/Remote Selector Switch	230VAC, 5A 2 WAY, 4Pole	1	
8	OPEN-OFF-CLOSE Selector Switch	230VAC, 5A 3 WAY, 4Pole	4	

Note: If vendor quotes for other than MOXA Iologik 1214 for sl.no 2, then vendor has to demonstrate the application (as mentioned below) during the technical bid at BHEL Bhopal free of cost. The material will be returned back to vendor after demonstration.



Panel to be supplied by SUPPLIER



Existing Panel

Application:

- RIO-1 and RIO-2 can communicate with each other over our existing LAN Network.
- Digital Output of RIO-1 can be made high / low based on Digital Input of RIO-2.
- Digital Output of RIO-2 can be made high / low based on Digital Input of RIO-1.