



85XX⁺

24-Channel Scanner/ DAQ Module

Monitor. Protect. Control.
Annunciation. Communication. Logging.

mSCAN⁺ CE **Modbus** Over RS485

PROFI[®]
NET

PROFI[®]
BUS

EtherNet/IP[®]



The 85XX⁺ is an upgrade on the most successful model 85XX; additional capabilities have been added by way of multi-serial ports, Ethernet port, Profibus-DP, USB port, scanning speed and alphanumeric display.

Modular and Expandable

85XX⁺ is modular in architecture and Expandable, 5 I/O slots can accommodate a mix of Analog Input, Digital Input, Open collector output, Analog output or Relay output to suit different applications in Power, water, Pipeline and Infrastructure industries. All field inputs are wired by Pre-Fab cables direct into panel terminals.

Configuration

85XX⁺ is configured using the **mSCAN⁺** software which is very user friendly; the unit can also be edited by front keyboard and display. The unit has numeric and alpha-numeric displays for value and tag display, Alarm/Trip and control status are displayed by discrete LEDs on front fascia.

Communication

85XX⁺ comes with one RS485 Port as a standard, a second RS485 Port, Ethernet Port & Profibus DP Port are options to enhance the communication capabilities of the unit and use it as an RTU, Alarm controller or protection device for motors, transformers, etc. It has optional USB port for logged data retrieval.

Alarm/Control

8 Relay and 24 OC outputs can be freely mapped as alarm/trip or control set point

Analog Output

An isolated 4-20mA Re-transmission output option is available for onward transmission to PLC/DCS/Recorder/SCADA. Max 8 output per card is possible.

Features

- Compact and Rugged
- Alpha-Numeric display for programmable tag no / Engg unit
- EMI/EMC Type test qualified & CE Marked
- 8 Channel Universal Analog Input Module
- 16 Channel Digital Input Module (Optional)
- 4/ 8 Relay Output Module (Optional)
- 24 Open Collector Output Module (Optional)
- Analog Output (Optional)
- Fast sampling and generation of Alarm/Trip
- User free mapping of Relay to Channels
- Comprehensive alarm/trip logic
- RS485 Serial port (one standard and 2nd Optional)
- 1X Ethernet port (Optional)
- 1X USB port (Optional for logged data retrieval)
- 1X Profibus-DP port (Optional)
- 2X ProfiNet Port (Optional)
- 2X EtherNet/IP Port (Optional)
- Modbus RTU over serial and Modnet over Ethernet Protocols
- Windows based free **mSCAN⁺** configuration software
- Datalogging option
- Extruded Aluminum Chassis with IP55 front fascia

Applications

- Substation Monitoring
- Motor/Generator Monitoring and Protection
- Transformer monitoring and protection
- Compressor/Pump/DG set monitoring
- Asset Monitoring
- As a Serial/Ethernet RTU
- Remote I/O module
- Multi Point On/Off control

USER-FRIENDLY PROGRAMMING AND MONITORING

mSCAN⁺ Software

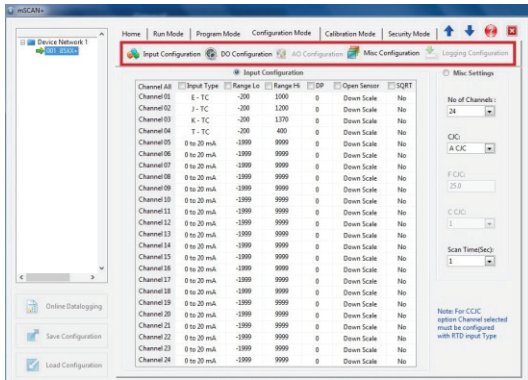
mSCAN⁺ Software is used to Monitor and Configure the Multichannel Scanner

- Auto device discovery of 85XX⁺ over RS485 Port
- Run Time Data monitoring
- Configuration through RS485 and Ethernet Port
- Data Log Retrieval (Periodic and Event) in .xlsx and .pdf file formats
- Online Data logging in .xlsx format
- Report Generation
- Alarm/Trip Setpoints
- Time Stamping

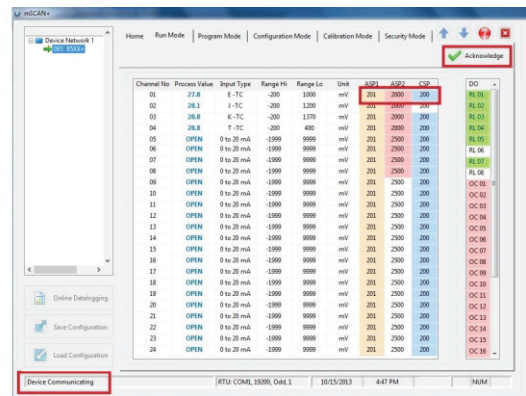
Easy to Monitor

Parameters	Front Display	mSCAN ⁺ Software
Real-time data	✓	✓
• Channel No.	✓	✓
• Process Value	✓	✓
• Zero/Span, Input Type	✓	✓
• Alarm Status	✓	✓
• Channel wise Process value	✓	✓

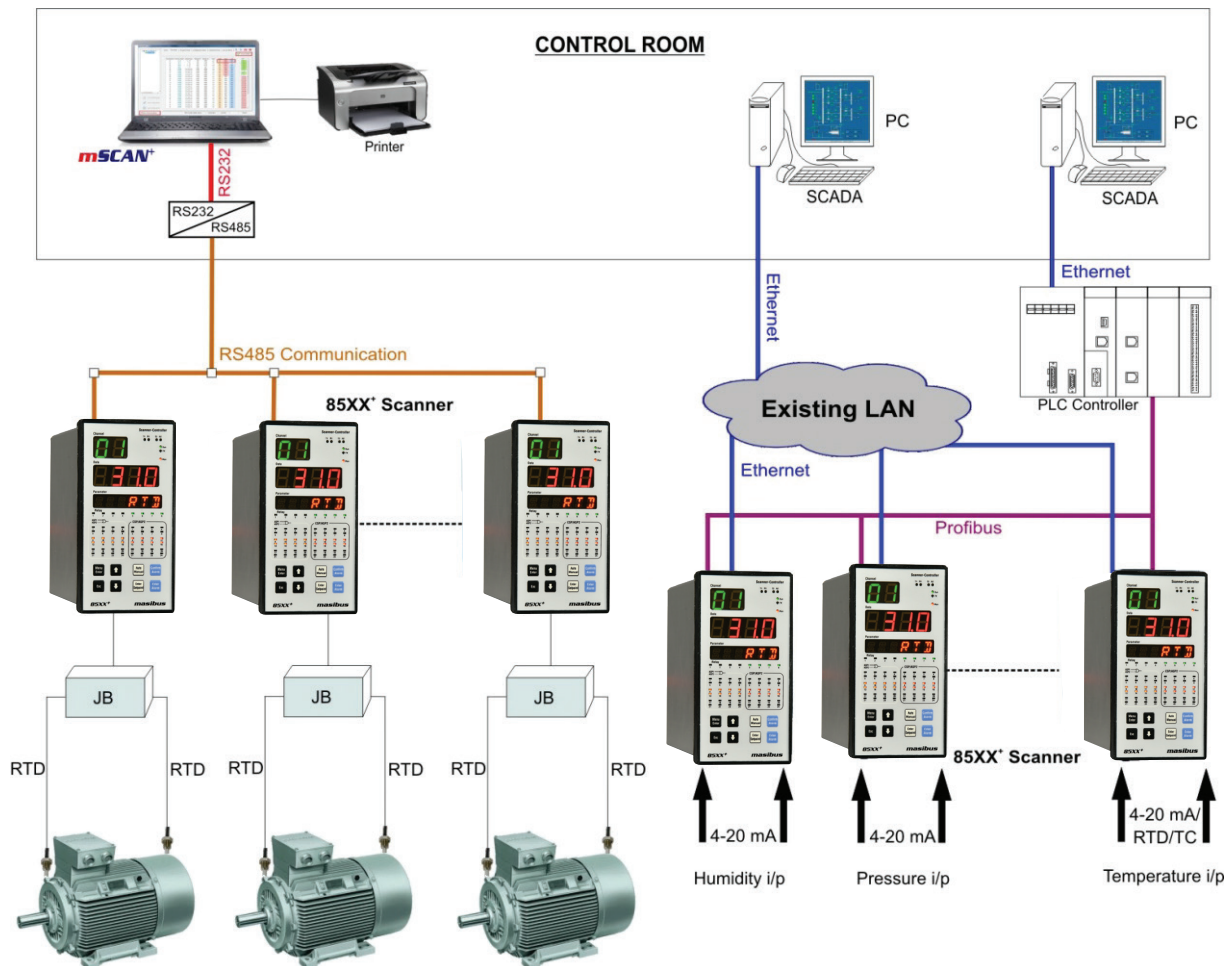
Programming using mSCAN⁺ Software



Monitoring using mSCAN⁺ Software

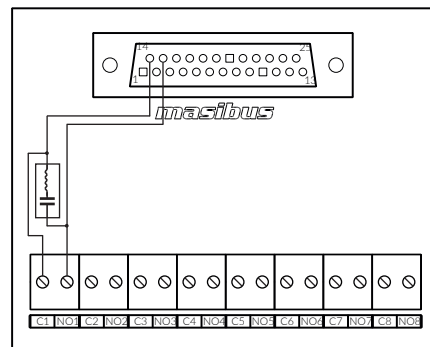
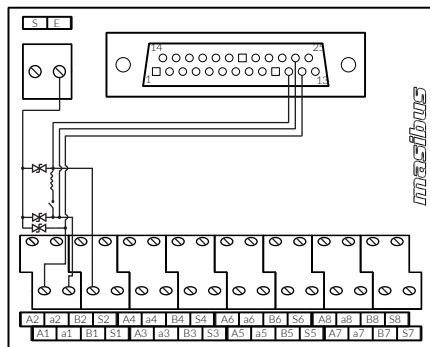


APPLICATION



TECHNICAL SPECIFICATION

Environmental		Compliance applicable only for 85XX+ CE Model	
Operating temperature	-10 to 55 °C	EN 61010-1:2010 (Safety)	
Storage temperature	0 to 80 °C	EN 61000-6-2:2005 (EMI/EMC)	
Humidity	20 to 95 % RH non-condensing	EN 61000-6-4:2007 (EMI/EMC)	
		Note: ▲ Options are not available in CE compliance Scanner	
Terminal Board for AI Module (Optional)		Terminal Board for Relay Module (Optional)	
Input Connection	MKKDS type connector screw up to 2.5mm ² conductor	Input Connection	25 Pin D-type plug in type Connector
O/P Connection	25 Pin D-type plug in type Connector	O/P Connection	MKDS type connector screw up to 2.5mm ² conductor
Size (L X W X H) in mm	90 X 90 X 75	Size (L X W X H) in mm	90 X 90 X 75
Mounting	35 mm DIN Rail	Mounting	35 mm DIN Rail



Ordering Code (85XX')

Model	No of I/O Slots and type					Power Supply	Communication	USB port [#]	Datalogging	
	1	2	3	4	5					
85XX' XX	XX	XX	XX	XX	XX	XX	XX	X	X	
	AI Analog i/p	N	None	N	None	U1 85-265 VAC	1X	1 x RS485	N	No
		AI Analog i/p	AI Analog i/p	RL	8 Relay	U2 18-36 VDC	2X	2 x RS485	Y	Yes
				RL4	4 Relay		1E	1 x RS485 + 1 x RJ45		
				OC2	Open Collector o/p		2E	2 x RS485 + 1 x RJ45		
				1A	1 no 4-20mA o/p		1P	1 x RS485 + 1 x Profibus-DP		
				2A	2 nos 4-20mA o/p		EP	1 x RS485 + 1 x Ethernet/IP		
				4A	4 nos 4-20mA o/p		PN	1 x RS485 + 1 x Profinet		
				6A	6 nos 4-20mA o/p					
				8A	8 nos 4-20mA o/p					
				DI	Digital i/p					

Ordering Code (85XX' with CE compliance)

Model	CE Compliance	No of I/O Slots and type					Power Supply	Communication	Datalogging				
		1	2	3	4	5							
85XX'	CE	XX	XX	XX	XX	XX	XX	XX	XX				
		AI Analog i/p	N	None	N	None	N	None	U1 85-265 VAC	1X	1 x RS485	N	No
			AI Analog i/p	AI Analog i/p	RL	8 Relay	OC1	Open Collector o/p	U2 18-36 VDC	2X	2 x RS485	Y	Yes
										1E	1 x RS485 + 1 x RJ45		
										2E	2 x RS485 + 1 x RJ45		

Note:

Specify X from ordering code.

If USB port is selected, Datalogging option must be selected. USB port will work with Masibus supplied pen drive only.

For Analog o/p type; other than 0/4-20mA please contact factory

Customer to specify required input type/range from Table-1 at the time of Order placement; else by default all channels will be calibrated for Input RTD Pt100 range

Prefab Cables Ordering Code

Part Code	Description
AIC-2.5-DB	8 points Analog Input cable, 25 Core 2.5 mtrs long with DB25 Connector (8 Ch: 1 Cable, 16 Ch: 2 Cables, 24 Ch: 3 Cables Required)
RLC-2.5	8 Relay output cable, 25 Core 2.5 mtrs long
OCC-2.5	24 OC output cable, 25 Core 2.5 mtrs long
DI-2.5	16 DI output cable, 25 Core 2.5 mtrs long

Terminal Board Ordering Code (Extra Cost)

Part Code	Description
m-85XX'-FIB-AI	8 channel Field Interface Board for Analog Input (For 8 Ch: 1 Module, 16 Ch: 2 Modules, 24 Ch: 3 Modules Required)
m-85XX'-FIB-RL	8 channel Field Interface Board for Relay output

Prefab Cables for Field Interface Board Ordering Code (Extra Cost)

Part Code	Description
m-AIC-2.5-D25M-D25M	8 points Analog Input cable, 25 Core 2.5 mtrs long with DB25 connector at both ends (8 Ch: 1 Cable, 16 Ch: 2 Cables, 24 Ch: 3 Cables Required)
m-RLC-2.5-D25F-D25M	8 Relay output cable, 25 Core 2.5 mtrs long with DB25 connector at both ends
m-RLC-2.5-D25F	8 Relay output cable, 25 Core 2.5 mtrs long with one end DB25 connector and other end pig tails