



85XX⁺-W

24 Channel Wireless Receiver/ Datalogger

Monitor. Receiver. Logger.
Communication.

mSCAN⁺

Modbus



The 85XX⁺-W is wireless receiver cum datalogger. It works with wireless Zigbee protocol, where in it will communicate with Masibus wireless transmitter and receive data from it. If communication breaks between Masibus wireless transmitter and 85XX⁺-W then Masibus wireless transmitter will log data in its internal memory and when communication is reestablished between both the devices then Masibus wireless transmitter will send all the data to 85XX⁺-W. Data can be retrieved from 85XX⁺-W through Citect SCADA software.

85XX⁺-W 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 status are displayed by discrete LEDs on front fascia.

85XX⁺-W has one RS-485 port as a standard, whereas, Ethernet Port is in options to enhance the communication capabilities of the unit

The 8 Relay outputs can be freely mapped to any channel set points and configured as Alarm functionality with Fail-Safe or Normal Logic.

The 24 OC outputs can be used as a status output for Alarm condition

Features

- Wireless communication over Zigbee Protocol
- Supports max 24 nos of Transmitter
- Wireless Data logging and Data backfilling
- Windows based mSCAN⁺ configuration software
- Modbus RTU over serial and Modnet over Ethernet Protocols
- Compact and Rugged
- Extruded Aluminum Chassis with IP-55 front fascia
- Alpha-Numeric display for programmable tag no/ Engg unit
- 8 Relay Output Module
- 24 Open Collector Outputs Module
- User free mapping of Relay to Channels
- Comprehensive alarm logic
- 1 x RS485 Serial communication port
- 1 x Ethernet port (optional)

Applications

- Asset Monitoring
- As a Serial/Ethernet RTU
- Backfilling with PC log software
- Pharmaceutical Industry
- Clean Rooms & Warehouses
- Food Industry
- Building Automation
- HVAC Systems
- Cold Storages
- Energy Management
- Vehicle Monitoring

USER-FRIENDLY PROGRAMMING AND MONITORING

mSCAN⁺ Software

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

- Auto device discovery of 85XX⁺-W 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 Setpoints
- RTC

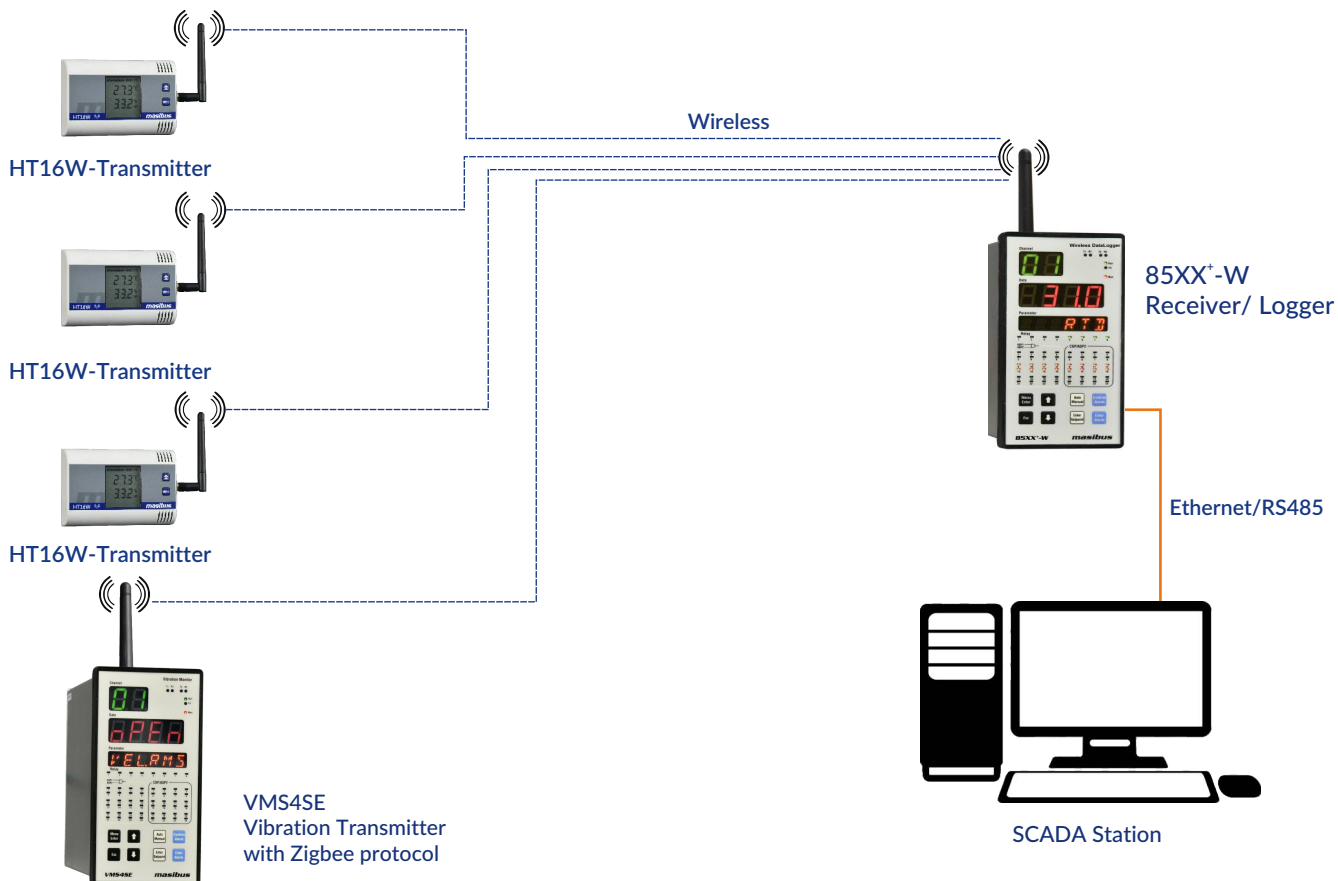
Easy to Monitor

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

	Temperature	Humidity	Alarm Status	Battery Status	RSSI	Record Number
TX 01	27.9 °C	0.0 %RH	OFF	100%	20 dBm	0
TX 02	120	120	OFF	0%	0 dBm	0
TX 03	120	120	OFF	0%	0 dBm	0
TX 04	120	120	OFF	0%	0 dBm	0
TX 05	120	120	OFF	0%	0 dBm	0
TX 06	120	120	OFF	0%	0 dBm	0
TX 07	120	120	OFF	0%	0 dBm	0
TX 08	120	120	OFF	0%	0 dBm	0
TX 09	120	120	OFF	0%	0 dBm	0
TX 10	120	120	OFF	0%	0 dBm	0
TX 11	120	120	OFF	0%	0 dBm	0
TX 12	120	120	OFF	0%	0 dBm	0

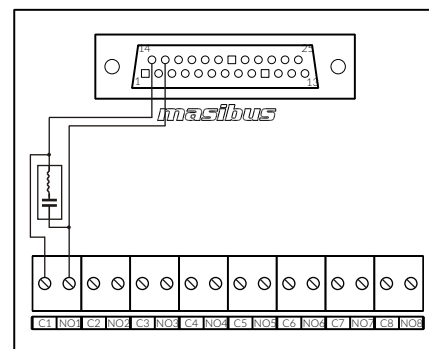
Address	Log Enable	Log Hour	Log Minute	Open Offset	Fetch Data	Memory Reset
TX 01	Start	0	1	11	OK	OK
TX 02	Stop	0	1	11	OK	OK
TX 03	Stop	0	3	11	OK	OK
TX 04	Stop	0	3	11	OK	OK
TX 05	Stop	0	3	11	OK	OK
TX 06	Stop	0	3	11	OK	OK
TX 07	Stop	0	3	11	OK	OK
TX 08	Stop	0	3	11	OK	OK
TX 09	Stop	0	3	11	OK	OK
TX 10	Stop	0	3	11	OK	OK
TX 11	Stop	0	5	11	OK	OK
TX 12	Stop	0	5	11	OK	OK

APPLICATION



TECHNICAL SPECIFICATION

Wireless Communication		Power supply	
Frequency Band	ISM 2.4 GHz	Voltage	85-265VAC, 50/60 Hz/ 100-295 VDC 18 - 36VDC (optional)
Protocol	Zigbee	Power Consumption	16VA (Max) [85-265VAC] 8VA (Max) [18-36VDC]
Transmission Power	63mW (+18dBm)	Isolation (Withstanding voltage)	Between primary terminals* and secondary terminals**: At least 1500 V AC for 1 minute Between primary terminals* and grounding terminal: At least 1500 V AC for 1 minute Between grounding terminal and secondary terminals**: At least 1500 V AC for 1 minute Between secondary terminals**: At least 500 V AC for 1 minute * Primary terminals indicate power terminals and relay output terminals. ** Secondary terminals indicate I/O signal and Communication O/P. Insulation resistance: 20MΩ or more @ 500 V DC between power terminals and grounding terminal
Receiver Sensitivity	-101 dBm		
Line of Sight Range	3000 meters(Outdoors)		
Indoor Range	90 meters typically		
Antenna	Dipole pluggable external		
Max.No.of Transmitter support	24 Channel		
Data backfilling through wireless	Yes		
Display and Keys		Physical	
Channel number	2-Digit, 0.56", Green seven segment LED	Size (in mm)	144 (H) X 72 (W) X 165 (D)
Process Value	4-Digit, 0.56", Red seven segment LED	Panel Cutout (in mm)	137 (H) X 68.5 (W)
Engineering Unit	6-Digit, 0.3", Orange Alphanumeric LED	Depth behind Panel (in mm)	155 / 203 (with cable connector)
Status LEDs	Manual, Run, Flt, Tx/Rx, Relay status Alarm Status per channel	Mounting	Panel Mount (Standard)
Keys	2 X 4 for Configuration, Operation and Calibration	Weight	1.25 Kg
		Enclosure Material	Extruded Aluminum
		Protection	IP20 (Overall, except terminals), IP55 (Front Facia)
Output		Environmental	
Alarm Output (Optional)		Operating temperature	-10 to 55 °C
Relays	8 Nos. per card	Storage temperature	0 to 80 °C
Type	C- NO or C-NC (Jumper Selectable)	Humidity	20 to 95 % RH non-condensing
Rating	2A @ 250VAC / 30VDC		
Connector Type	25 D-Sub		
Open Collector (OC) Output (Optional)			
OC Outputs	24		
Type	Sinking		
Rating	100mA@30VDC		
Connector Type	25 D-Sub		
Communication Output		Field Interface Board for Relay Output (Optional)	
RS485 (Standard)		Din Rail Mount Field Interfacing Board is designed for terminal panel of Relay Output signal to interface with field signals.	
Interface	2 Wire, EIA RS485	No of Input Channel	8 Relay Input
Protocol	Modbus-RTU Slave	Input Connection	Screw type PCB Terminal Block (2.5mm ² conductor size)
Baud Rate	9600 or 19200 or 57600	No of Output Channel	8 Relay Output
Ethernet (Optional)		O/P Connection	25 Pin D-Type Plug in Type Connector
Interface	RJ45	Size in mm (L X W X H)	90 X 90 X 75
Protocol	Modbus - TCP/ IP(Modnet) Slave	Mounting	DIN Rail (35 mm)
Speed	10 Mbps		
Data Logging			
Memory	25MB (Periodic), 7MB (Event)		
Logged Data Retrieval	Through mSCAN [®] Software		
Min Periodic Log Time	1 min		
No of Records	8000 Records Per Individual Channel		



Ordering Code

Model	Relay Option	Power Supply	Communication
85XX ⁺ -W	N None RL Relay OC Open Collector o/p	U1 85-265 VAC/ 100-295 VDC U2 18-36 VDC	1X 1 x RS485 1E 1 x RS485 + 1 x RJ45

Prefab Cables Ordering Code

Part Code	Description
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

Field Interface Board Ordering Code (Extra Cost)

Part Code	Description
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-RLC-2.5-D25F-D25M	8 Relay output cable 25 Core 2.5 mtrs long with DB25 connector