XWEB PRO

New family of control and supervisor systems





Dear Customer,
Emerson's newest Dixell platform, XWEB PRO with Wi-Fi connection, is suitable for HVAC/R plants such as petrol stations, supermarkets and hypermarkets. This high-performance system features improved connectivity and energy-saving functions and is accessible from all mobile devices.

XWEB PRO improves plant management with several new functions, including the XeCO2 system for optimized, high-efficiency management of CO2 plants.

Product News 08/20

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1. Applications

New XWEB PRO control, monitoring and supervisor systems are the evolution of the XWEB EVO family. They maintain all EVO functionalities, extending them to current market needs and increasing their performance and functionalities.
The platform offers scalable solutions for every application such as petrol stations, hypermarkets, minimarkets and restaurant chains.



2. Main features

XWEB PRO systems, besides all features of the well-known XWEB EVO family, have new, powerful hardware that exhibits high performance of speed elaboration and visualization. The Web user interface has been developed to allow easier and faster access to the most important information whether local, remote, or mobile.

2.1 Connectivity

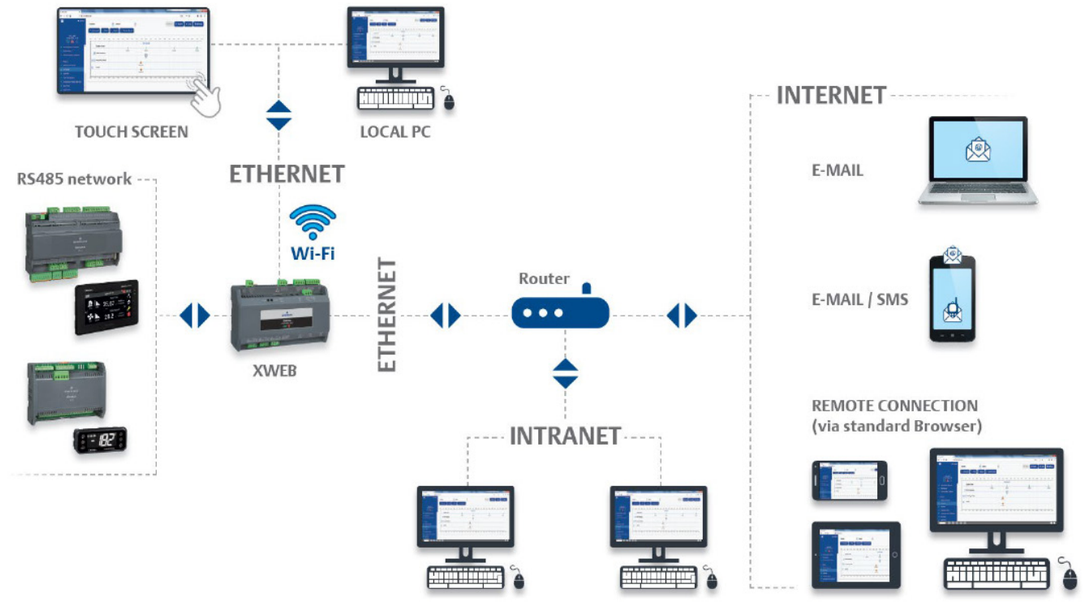


XWEB PRO offers Wi-Fi connection through a NANO-Wi-Fi dongle (see section 4); it is now possible to connect XWEB PRO to an existing Wi-Fi network or create your own Access Point to access through mobile devices (Smartphone, Tablet, or PC) without the need of further network infrastructures.

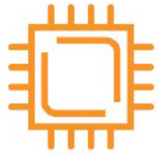
The XWEB1000D model is equipped with 3 RJ45 ports (2 Ethernet + 1 switch) that allow simultaneous access from/to multiple wired networks, decreasing complexity and IT costs. Multiple network use is particularly valued because it allows the management of one remote and one local network independently, with the local network providing a connection to a touch screen. Additional advantages include, for local connection to XWEB PRO, service staff will not need to disconnect the monitoring system from the store, but can use a direct connection instead. The XWEB5000 model, with its 2 RJ45 ports (2 Ethernet), allows the independent management of multiple networks as well.

Several RS485 serial ports allow the instrument network to be shared in different areas: this enables faster and more stable communication, reducing interferences attributed to possible malfunctions of one section, while ensuring accurate operation of the remaining sections.

Here below an example of connection of the XWEB PRO family referred to the XWEB1000D model.



2.2 User experience



The new hardware ensures optimal processing speed and quick access to web pages. Operations such as downloading and parameter changes are performed quickly, making service operations easier and more efficient.

2.3 Backwords compatibility

Libraries, backup, and configurations used for XWEB EVO series are compatible with the new XWEB PRO family. This ensures quick installations and an easier replacement of already existing devices with new models.

2.4 Plant optimization

XWEB PRO enables improved plant management thanks to several new options, such as the XeCO2 system for optimized management of CO2 plants, or the “Compressor Guard” function for compressor safety.



An integrated system composed of XWEB PRO, XM600 for refrigerated cabinets and iProRACK for racks, works in conjunction with overfeed evaporators thanks to floating management of superheat and management of the suction liquid receiver level in the medium temperature line.



The “Compressor Guard” function protects the compressor against flood infiltration. If the compressor cannot be switched ON because of safety times blockage or for active alarms, the system temporarily blocks the liquid injection to the evaporators until the compressor become available again.

2.5 Safety

Dixell focuses close attention to security vulnerabilities and for this reason the XWEB PRO software ensures compliance with advanced safety systems and blocks unauthorized accesses, attacks or other threats. Advanced algorithms for protection and control have been developed with a dedicated section for alarm notifications, created independently from the list of users who can access the web interface.

The management of users and passwords has been expanded as a result of integrating LDAP service (Lightweight Directory Access Protocol), the industry standard in user approvals and user management.

2.6 High frequency polling management

Especially suited for the analysis of floating variables such as superheat and pressure, the new polling management allows recording preset variables with an improved sampling time. Increased available data results in a more detailed analysis useful for the start-up of a new plant or to analyze possible critical situations.



2.7 Advanced alarm sending

Advanced alarm management is one of the XWEB PRO family strengths. By selecting the variables of interest during an alarm, it is possible to receive the notification with a detailed report concerning the plant situation before, during and after the event, making it easier for the technical support staff to identify possible malfunctioning.

2.8 Approvals and direct loads

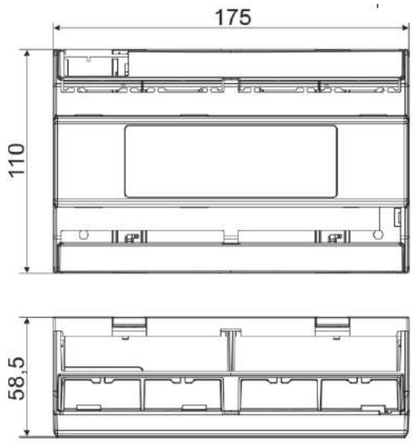
Models in DIN format have UL approval; for versions with 110/230V direct power supply, a dedicated supplier/ transformer is not required inside the electrical panel. On DIN format models, all alarm relays can drive 230V loads up to 5A directly.

3. Features

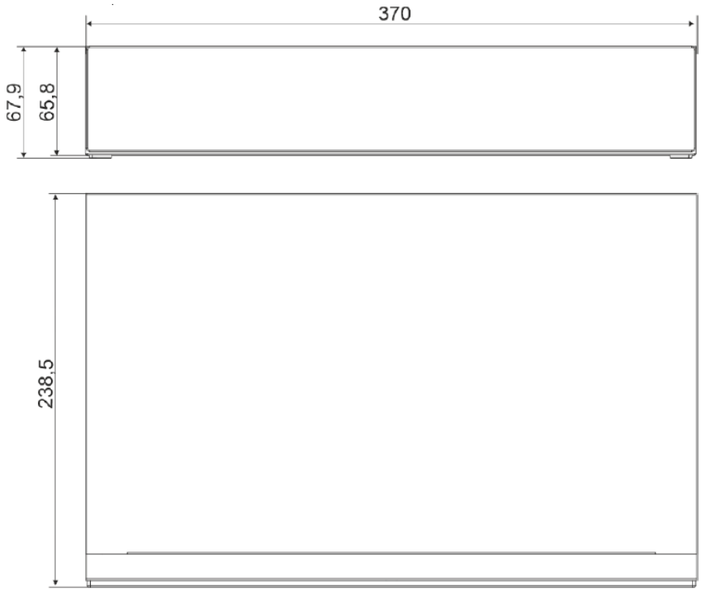
	XWEB300D	XWEB500D	XWEB1000D	XWEB5000
Format	10 DIN Rail	10 DIN Rail	10 DIN Rail	rack 19 inches
Power supply	100÷230Vac	100÷230Vac	24Vac	110Vac, 230Vac
Display	via LAN port	via LAN port	via LAN port	via LAN port
N° of instruments	6÷18	36÷50÷100	100÷150	494
USB Host socket	1	1	1	6
Relay outputs	1	3	3	3
Digital inputs		1	2	2
Ethernet socket	1	1	2	2
RS485 socket	1	2	4	2
External modem support	•	•		•
UL approval	•	•	•	
Protected web user interface	•	•	•	•
Multi-user management	•	•	•	•
Centralized user management	•	•	•	•
Language management	•	•	•	•
Alarms on XJR40D module		•	•	•
High frequency data management	6h	6h	6h	48h
Circular graphics	1min	1min	30sec	30sec
Minimum interval of temperature log	•	•	•	•
Real time device visualization	•	•	•	•
Parameter programming, commands and setpoint modification	•	•	•	•
Alarm setup	•	•	•	•
System logs	•	•	•	•
Charts	•	•	•	•
Data report	•	•	•	•
HACCP report	•	•	•	•
Food quality report		•	•	•
Global commands		•	•	•
Consumptions analysis	•	•	•	•
Performance meter		•	•	•
Diagnostic for communication quality	•	•	•	•
Management of scheduled events		•	•	•
Calendar	•	•	•	•
Automatic export module	•	•	•	•
Backup/restore	•	•	•	•
Layout		•	•	•
Connect+ support	•	•	•	•
ModBUS TCP/IP gateway	•	•	•	•
TCP/IP API protocal	•	•	•	•
Wireless connection with Wi-Fi dongle	•	•	•	•
Compressor guard system		•	•	•
CRO system		•	•	•
XeCO2 system			•	•
Dew point module				•
Supervisor module				•

3.1 Dimensions

XWEB300D – XWEB500D – XWEB1000D



XWEB5000



4. Accessory for Wi-Fi connection



In order to connect XWEB PRO models in Wi-Fi mode, Dixell provides the NANO-Wi-Fi adapter.

5. Availability and orders

XWEB300D/500D/1000D PRO models can be ordered from October 15th, 2020, whereas the XWEB5000 PRO model is available from November 15th, 2020.

X	W	E	B	3	0	0	D	-	8	B	C	0	0	P

B		C	
N° of instruments		Software	
C	6	0	Standard
D	18	1	CG (4 MOT)

X	W	E	B	5	0	0	D	-	8	B	C	0	0	P

B		C	
N° of instruments		Software	
F	36	0	Standard
G	50	1	CG (4 MOT)
		2	CG (4 MOT) + CRO (3 MOT)

X	W	E	B	1	0	0	0	D	-	2	0	C	D	0	P

C		D	
N° of instruments		Software	
3	100	0	Standard
4	150	2	CG (8 MOT)
		3	CG (8 MOT) + CRO (5 MOT)
		4	CG (8 MOT) + CRO (5 MOT) + XECO2 (2 MOT)

X	W	E	B	5	0	0	0	-	6	1	C	0	0	P

C	
Software	
0	CG (8 MOT)
1	CG (8 MOT) + CRO (5 MOT)
2	CG (8 MOT) + CRO (5 MOT) + DEWP + SPV
3	CG (8 MOT) + CRO (5 MOT) + DEWP + SPV + XECO2 (2 MOT)
4	CCG (8 MOT) +CRO (5 MOT) + XECO2 (2 MOT)

Note: CG = with “Compressor Guard” system
MOT = motor/s
SPV = with supervision
XECO2 = with XeCO2 system
DEWP = with function for management of the “Dew Point”

6. XWEB PRO trainings



The XWEB PRO training timetable will be available from October 15th, 2020. Please contact our sales department for date and availability.