



# XMU800



## Merging Unit for Low Power Instrument Transformers

In the digital chain for current and voltage measurement, the XMU800 merges digital data to make them IEC 61850 compliant. It interfaces with multiple digital primary converters installed on the primary equipment.

### Smart and Powerful Device

When signals coming from LPIT primary sensors are digitised via the PC12 primary digital converter, the data is sent to the XMU800. Several PC12 can send their data to one merging unit.

The XMU800 merges all signals and synchronises them using 1 PPS (Pulse Per Second) input or the PTP IEEE 1588 protocol. Then, the data is packed into one or several IEC 61850-9-2 frames and sent to protection relays, data loggers, smart terminals, etc. The device has a powerful FPGA core (Field-Programmable Gate Array), creating a real time matrix for inter-connections between HV sensors and secondary Intelligent Electronic Devices (IEDs).

### Compliant with GIS Architectures

The XMU800 design is compact, with all the communication ports at the back of the box. It fits in a 19-inch wide bay. The large number of I/O ports allows the XMU800 to fulfill most GIS substation architectures (single busbar, double busbars, one-and-a-half circuit breaker) thanks to the 13 Ethernet ports.

### Highly Communicative Device

Thanks to its powerful core, the device is able to communicate via IEC 61850-9-2 (& 9-2 LE) and IEC 61869-9 ready, sending sample values (SV) to a 9-2 network simultaneously over several ports.

## Key Benefits

- High-performance and rugged design
- Self-monitored and easy to set up via webserver
- Many input/output ports provide compatibility with most known GIS layouts
- Remote supervision of primary sensors and converters



## User-friendly Interface

A webservice is integrated into the device and allows users, depending on access rights, to check the status of the unit, change certain parameters and display measured values on a webpage. This can be done via any computer equipped with a standard internet browser.

Available ports:

- 1 PPS input (a PPS output is also available for daisy chaining for IEEE 1588 synchronisation)
- Ethernet input ports
- Power supply and alarm contact
- HMI Ethernet connection
- Optional ports on request (e.g. 600044-8)



XMU800 rear view

## Ratings

Unit Type	XMU800	
Ethernet ports:		
- Input (PC12)	Qty	6
- Output (61850-9-2 type)	Qty	7: 4LC, 3RJ45
- HMI/8.1 connections	Qty	1 front (HMI) + 1 rear (8.1 compliant)
PPS synchro. ports	Qty	1 In + 1 Out
Optional ports (Compliant 44-8)	Qty	8 (4 In + 4 Out)
Auxiliary contacts	Type	Alarm NO & NC
MTBF (acc. To MIL-HDBK-217F)	Hours	340 000
Dimensions (mm):		
- Height:	mm	90
- Width:	mm	480
- Depth:	mm	240 / 340 with optical fibre

### Important note:

This product may not be sold on its own. It must always be integrated in a global Low Power Instrument Transformers (LPIT) solution.

For more information please contact  
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### Worldwide Contact Center

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## Technical Characteristics

### Rated Supply Voltage

Option 1: 100 to 350 Vdc  
+ 100 to 240 Vac  
Option 2: 20 to 72 Vdc  
Power cons. max. 18 W @ 25°C

### Ambient Temperature

-40°C up to 70°C

### Protection Index

IP20, as per IEC standard

### Case Material

Anodised aluminium (EMC)

### EMC immunity Standards

IEC 61000-4-2,4,5,8,16 Level 4  
IEC 61000-4-3,6,17 Level 3

### Emissions Standard

EN55022 Class A

### Communication Standards

IEC 61869 -1, -6, -7, -8, -9



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