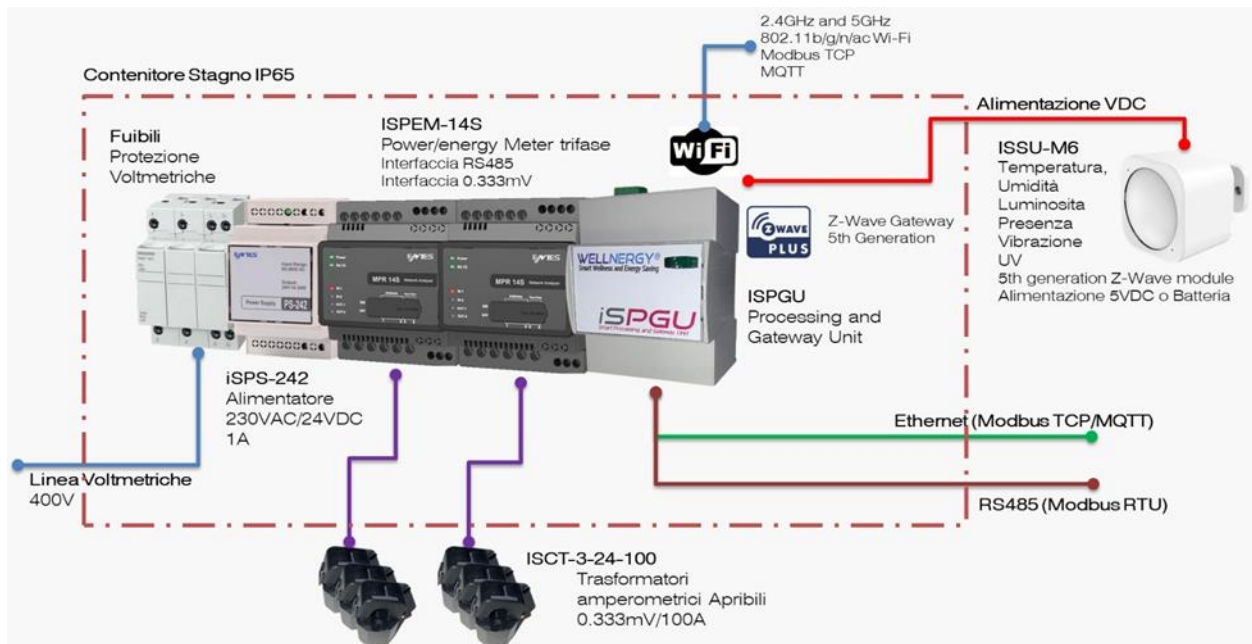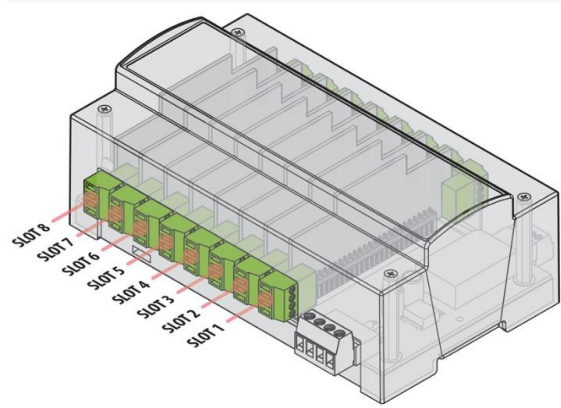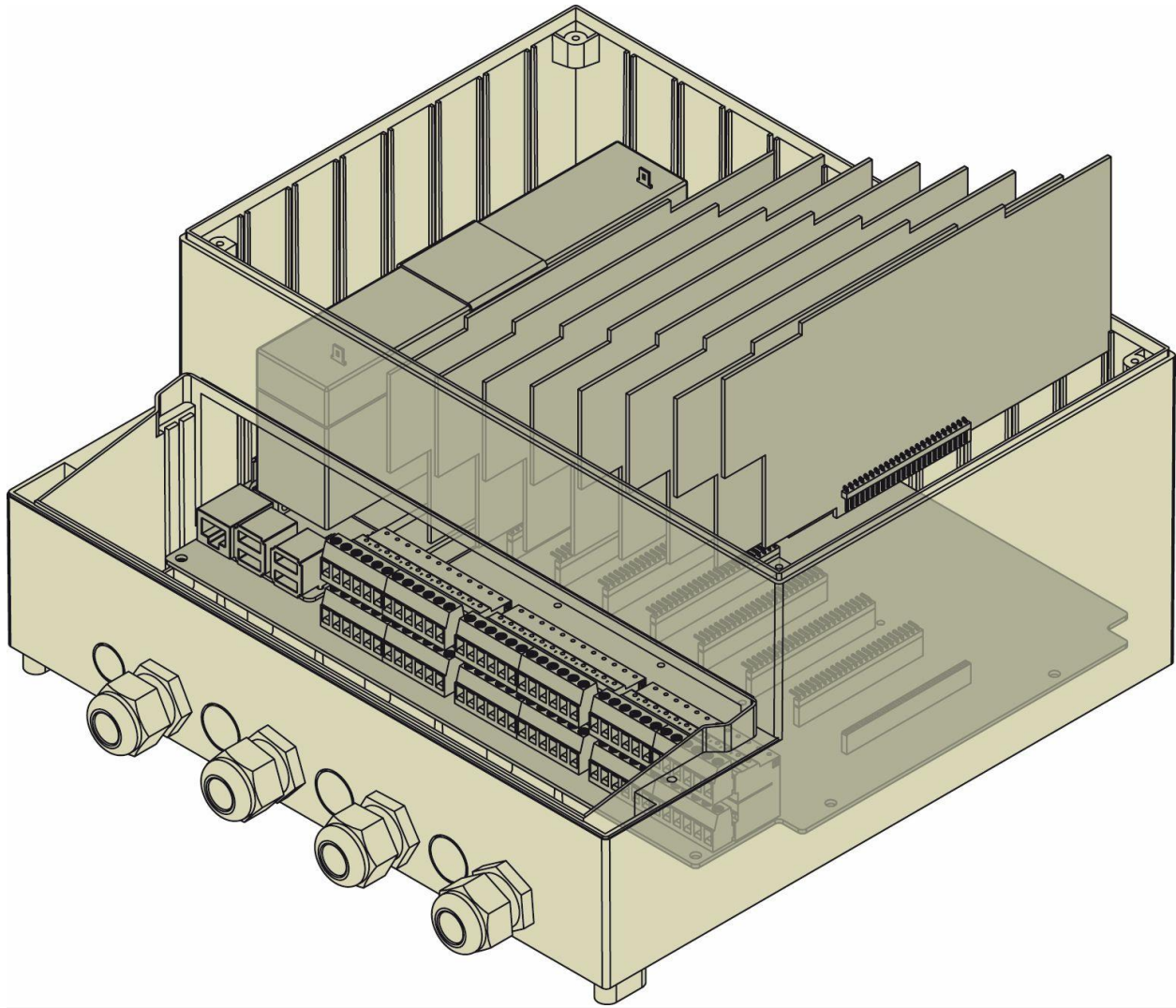We have the ability to read a total of 8 inputs, be it wind, Generator, or main Grid E.C.T at the same time in Real-time measuring all power consumed

Available Card Types

Electrical Measurement
Type EMA
1 x or 2 x Three Phase meters, up to 16 three phase measurement Lines (Common Voltage)
Type EMB
1 x Three Phase meter/network Analyzer

Analog IN/OUT
Voltage
2 x 0-10VDC In + 2 x -10VDC Out
Current
2 x 0-20mA in + 2 x 0-20mA Out

Digital Input
6 x digital in 12-24VAC/DC – 230VAC
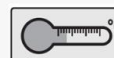
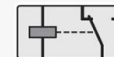**Temperature Sensors**
2 x PT 100 input
1 x THJ probe
1 x i2C + 1 x One Wire for external sensors

Rele Output
6 x DC/AC Rele Output 10A

SLOT 8
SLOT 7
SLOT 6
SLOT 5
SLOT 4
SLOT 3
SLOT 2
SLOT 1

Unit can use up to 8 interface modules in different combinations
- Several communication options
- Modbus RTU Interface
- One Wire Interface

iSBMS
Smart Building Management Solutions

C4 DIGITAL SYSTEMS

iSEMU-XEB
Smart Modular Energy Meter IP65

Modbus WIFI LoRa MQTT

The Complete Modular solution for energy monitoring and assets control

Modular and Multifunctional Unit	Compact and modular unit for energy monitoring. The ISEMU and ISEMCU family of units offer a wide selection of units aimed at energy monitoring and system management. They are pre-assembled units ready for installation in the field, equipped with a wide range of interfaces and data acquisition capabilities for the most diverse operational needs. The units are equipped with integrated data processing units and may have their own local WEB interface for data configuration and visualization. They have advanced IoT systems for data exchange and communication with any BMS or cloud systems. Unit can also be configured with other general purpose modules: digital in, digital out, PT100, 0-10V IN/out, 4-20mA in/out.
Electrical measurement	In its compact Din configuration the unit can host up to 16 three-phase, Type A measuring lines (shared voltages) or 8 three-phase Type B measuring lines (independent Voltages). I rms, V rms, I pk, V pk (each phase), Active, Reactive, Apparent Power, Inductive/reactive total/phase Power factor, Bi-directional total/phase energy active/reactive (inductive/capacitive)
Accuracy	Voltage (230-400VAC) +/- 0,5% RDG (10...100% Un) Current +/- 0,5% RDG (5...100% In) @5A Power - Active : +/- 0,5% RDG ; Reactive : +/- 0,5% RDG Active Energy: Class C i.a.w. EN50470-1/3 or Class 0,5 S i.a.w. EN62053-22 Reactive Energy: Class 0,5 S i.a.w. EN62053-24
Current Transformers	For maximum installation flexibility the same unit can interface both standard CT or the more advanced Voltage transformers (333mV) or Rogowski coils.
Voltage measurement	Depending on the version it may have common or independent Voltage measuring lines.
Power	9-24 VAC/DC
Physical Interfaces	Ethernet (RJ45), Modbus RTU, Power line (Narrow band)
Wireless Interfaces	Wifi 2.4GHz, Lora, NB-IOT
Communication protocols	Modbus RTU/TCP, MQTT
Features	Electrical power and energy measurements, tariffs configuration and automatic costs calculations per measured lines. Average, peak, demand over 15 minutes. Quad Core processor Integrated Web Interfaces and graphical UI. Local Data Base and data Storage up to 120Gb.,
Standards	EN61000-6-2; EN61000-6-4; EN61000-4-2; EN61000-4-3; EN61000-4-4; EN61000-4-5; EN61000-4-6; EN61010-1; EN61010-2-30.
Dimensions	
Weight	300g
Feeding and absorption	230VAC
Montage	Wall/DIN Bar

iSEMU-M is a product of the family

C4 DIGITAL SYSTEMS
USA Technology

Authorized seller

5G
4G
WiFi
LoRa
NB-IoT

Operating Center

TECHNICAL HYPERVISION
Powered by Wellnergy

Modbus
MQTT

Modular-Multifunctional Meter Unit

Local Monitoring/BMS

Voltage/Currents/AC-DC
Modbus gateway – I2C – One Wire

Fuel Meter

Solar Energy | Wind Energy | Data center | EVCS | Generators | Power Station

The Complete solution for energy monitoring and control

ISEMU-XEB is an integrated modular unit for smart monitoring and BMS application. Fully configurable upon specific requirements. It can be an advanced three-phase energy meter and network analyzer, with up to 16 monitored three phase lines with advanced features, alarms with configurable thresholds, billing/tarifs management functions. The modular unit can also be configured to use digital IO, Analog IO, temperature sensors and rele to provide a wider range of functions.

Through the optional Modbus TCP gateway function and i2C/one wire interfaces, it can also acquire additional data from other devices in the field. It can directly interface any type of Current transformers, _Current type (5A), Voltage type (333 mV), Rogowsky Coils_. It can interface DC current sensors via Modbus RTU. Available as Modular DIN unit or IP65 Boxed.

It can be locally interfaced to any existing Monitoring or BMS system, or it can communicate through Wi-Fi or NB-IOT network (LTE-CAT.M1/LTE NB-IOT1, GPRS/EDG) with the Technical Hypervision platform or the Affectli Digital Twin solution. The unit can be supplied as stand alone or with a number of advanced services depending on the requirements.
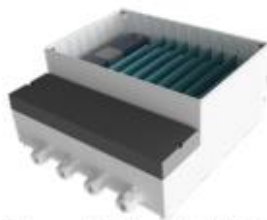
Unit can use up to 8 interface modules in different combinations
- Several communication options
- Modbus RTU Interface
- One Wire Interface

The same unit can use any type of current transformers. Simplified installations
- Current CT (5A)
- Voltage CT (333 mV)
- Rogowsky Coils
- DC Measurement devices

Hall Effect DC sensors 50-500A

Rogowsky Coils Linear 0-1000A

Solid Core CT 5A/333mW

Split Core CT 5A/333mW

Ad-Hoc CT Customised solutions

Available Card Types

Electrical Measurement
Type EMA
1 x or 2 x Three Phase meters, up to 16 three phase measurement Lines (Common Voltage)
Type EMB
1 x Three Phase meter/network Analyzer, up to 8 three phase measurement lines (independent voltage)

Analog IN
3 x 0-10VDC In
3 x 0-20mA in

Analog OUT
3 x 0-10VDC Out
3 x 0-20mA Out

Digital Input
6 x digital in 12-24VAC/DC – 230VAC

Temperature Sensors
2 x PT 100 input
1 x THU probe
1 x i2C + 1 x One Wire for external sensors

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