

Innovative Electronic Systems

New UPM analyzers & smart kits

Power analyzers for energy control in industrial environment

for CTs (UPM209 – UPM309)

for DIRECT connection up to 80A (UPM209)

for ROGOWSKI coils (UPM209RGW – UPM309RGW)





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NEW UPM ANALYZERS



UPM209

- Compact (4 DIN modules)
- Clear LCD display
- For Din Rail mounting
- Digital output in RS485 version



UPM309

- Ultra slim (39 mm depth)
- Impressive LCD display with big characters
- For Panel mounting
- Digital inputs/outputs
- Analogic output (optional)

NEW UPM ANALYZERS MAIN FEATURES

Backlit LCD display





- Easy and quick to install
- Possibility to connect by PT
- MODBUS RTU/ASCII protocol by RS485 port or MODBUS TCP protocol by Ethernet port
- Easy to upgrade anytime on field

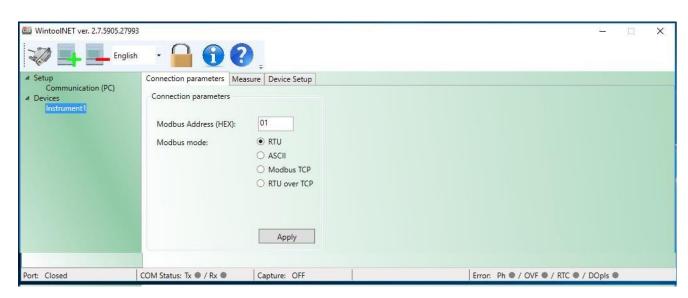
NEW UPM ANALYZERS MAIN FEATURES

FULLY MANAGEABLE REMOTELY

(Programming, Reading and Updates) by:

- RS485 port: Modbus RTU/ASCII protocol via WintoolNET or third-party software
- **Ethernet port**: Modbus TCP protocol via <u>WintoolNET</u> /third-party software or <u>Webserver</u> (try following login ID / password: demo)

Thanks to Modbus TCP protocol, it is possible to connect a laptop to the Ethernet device locally without Internet connection!



BASIC VS. ENHANCED

Feature	BASIC	ENHANCED
Memory:	1 MB	8 MB
Recording:	Active & reactive power AVG	MIN/AVG/MAX values of real time parameters
Recording setup:	Enable/disable, fixed parameter list	Programmable selecting max. 24 parameters
Harmonic monitoring:	THD only	THD + Harmonic analysis up to 15th
Extra feature:	-	 Energy counter recording generating a standing alone file. Installation and measurement hour counter.

The enhanced version of new UPM analyzers are able to record max 24 parameters with rate min 1 min.

Please refer to the table for filling in time.

\		
1	12	57
5	12	287
10	12	574
15	12	862
1	24	29
5	24	147
10	24	295
15	24	900

Recording Time No. Params Fill in Time

^{*}Please note that Smart Kits are available only in enhanced versions.



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SMART KITS



For Din Rail mounting



UPM309RGWFor Panel mounting

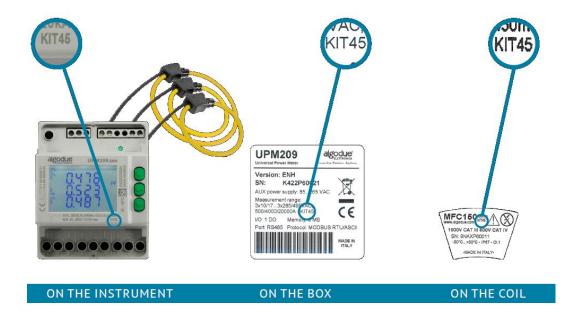
What is a SMART KIT?

It is a kit consisting of:

Network analyzers + 3 Rogowski coils

SMART KITS MAIN FEATURES

- The integrator is included in the analyzer, so Rogowski coils are connected directly to the meter
- 4 available KITs according to coils length: 30 cm (KIT30), 45 cm (KIT45), 70 cm (KIT70), 90 cm (KIT90)



- 3 current full scale selectable on field among the following values: 500A, 4000A, 20kA. See the video by clicking here
- Installation without interruption of plant
- All technical features of standard UPM209 and UPM309 analyzers

SAVE MONEY AND TIME!

Smart Kits are **COMPLETE solutions:** so you do not lose time in dealing with multiple vendors, understanding the different required configurations, assembling and combining different parts with different instructions and different assistances and guarantees.

They are **COMPACT and SLIM**,

therefore reducing transport and storage costs at purchase and they are suitable for installation in places by small space.



SMART KITS APPLICATION BENEFITS

- There is no need for external integrator which is expensive, it requires space in cabinet and an additional installation.
- They are conceived and designed as a READY TO USE kit for electricity measurements. So you do not waste time figuring out how to connect the different parts.
- The Rogowski coil is easy and fast to install. It is very **useful for retrofitting applications** on existing switchboards or for energy audit. In case of changes on the plant current value, the instrument can be adjusted for the new current consumption without replacing the Rogowski coil.
- Even if the values to be monitored are not known, it is not necessary to spend money (and decision time) in buying different CTs as the Rogowski coils have a measuring range up to 20kA.

ALGODUE SMART KITS BENEFITS

- Save money choosing our complete solution! The smart kit is from 20 to 30% cheaper compared to purchasing power analyzer, integrator and Rogowski coils.
- The accuracy of the total kit is better than if you combine in the same measuring chain an already installed analyzer + integrator + Rogowski coil from different manufacturers, because everything is calibrated and tested together!

(ex. UPM309RGW assures 1% total accuracy)

- Ethernet version of smart kit is unique on the market!
- The most compact kits on the market!