




DATA LOGGERS

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MAIN MEASUREMENTS

TRMS

AC voltage in single-phase/three-phase systems

AC current in single-phase/three-phase systems

MEMORY AND RECORDING

Max number of simultaneously selectable parameters

Recording with selectable integration period

Indicative memory duration (single-/three-phase in days @ PI=5min)

Internal memory capacity

DATA LOGGERS

	XL421	XL422	XL423	XL424
AC voltage in single-phase/three-phase systems	-	-	Single-phase	Single-phase / three-phase
AC current in single-phase/three-phase systems	Single-phase	Single-phase / three-phase	-	-
Max number of simultaneously selectable parameters	1	3	1	3
Recording with selectable integration period	1s, 6s, 30s, 1min, 5min	1s, 6s, 30s, 1min, 5min	1s, 6s, 30s, 1min, 5min	1s, 6s, 30s, 1min, 5min
Indicative memory duration (single-/three-phase in days @ PI=5min)	455	455 / 1820*	455	455 / 1820*
Internal memory capacity	1MB	1MB	1MB	1MB

ADDITIONAL CHARACTERISTICS

Protection rating	IP65	IP65	IP65	IP65
Measurement category	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V
Power supply	2x Batteries AA	2x Batteries AA	2x Batteries AA	2x Batteries AA
Provided PC interface with software for Windows	•	•	•	•
Size (LxWxH) (mm)	120x80x43	120x80x43	120x80x43	120x80x43
Weight (batteries included)	500g	500g	500g	500g
Reference standard for safety	IEC/EN61010-1	IEC/EN61010-1	IEC/EN61010-1	IEC/EN61010-1
Order code	HV000421	HV000422	HV000423	HV000424

* According to battery duration.



ORDER CODE HV000421 | HV000422

XL421 | XL422



TRMS SINGLE-PHASE AND THREE-PHASE CURRENT DATA LOGGER

XL421 and XL422 are **Data Loggers** capable of measuring and recording the true root mean square (TRMS) value of AC current up to 2500A AC in, according to the model single-phase or three-phase, electric systems for different applications (evaluation of load currents, rated powers of transformers, etc.). The devices have a comfortable mobile structure with integrated flex clamp jaws which allow surrounding also a big-sized cable or bar. Thanks to an advanced memory management algorithm it is possible to monitor a system even for a long time. The devices start recording with a **sampling period** which can be selected through software among 1, 6, 30 and 60 seconds and, when memory is almost full, the previously recorded values are "re-sampled" according to the subsequent value of the sampling period, thus freeing part of the memory; the devices then go on recording new values, using the new measuring interval. In this way, it is possible to keep the device recording up to **approximately 1 year according to the model**. Each recording is kept stored in the internal memory and can be **downloaded and managed by PC** always through a dedicated software. A special adhesive strap is also provided with the devices, which makes it possible to place them in any place in the installation where measuring is needed. The high protection rating (IP65) makes these devices fully reliable also under extreme operating conditions.



ORDER CODE HV000423 | HV000424

XL423 | XL424



TRMS SINGLE-PHASE AND THREE-PHASE VOLTAGE DATA LOGGER

XL423 and XL424 are **Data Loggers** capable of measuring and recording the true root mean square (TRMS) value of Voltage up to 600V AC or, according to the model, in **single-phase or three-phase** electric systems, for different applications (evaluation of mains voltage, load unbalance, etc.). The devices have a comfortable mobile structure with integrated flex clamp jaws which allow surrounding also a big-sized cable or bar. Thanks to an advanced memory management algorithm it is possible to monitor a system even for a long time. The devices start recording with a **sampling period** which can be selected through software among 1, 6, 30 and 60 seconds and, when memory is almost full, the previously recorded values are "re-sampled" according to the subsequent value of the sampling period, thus freeing part of the memory; the devices then go on recording new values, using the new measuring interval. In this way, it is possible to keep the device recording up to **approximately 1 year according to the model**. Each recording is kept stored in the internal memory and can be **downloaded and managed by PC** always through a dedicated software. A special adhesive strap is also provided with the devices, which makes it possible to place them in any place in the installation where measuring is needed. The high protection rating (IP65) makes these devices fully reliable also under extreme operating conditions.



Functions and characteristics

- TRMS single-phase current measurement (**XL421**)
- TRMS three-phase current measurement (**XL422**)
- Measuring range: 1 ÷ 2500A AC
- Accuracy: ±(1.0%reading+1 digit)
- Resolution: 1A
- Operating frequency: 50±6Hz, 60±6Hz
- Bandwidth: 3200Hz
- Sampling frequency: 64 spots in 20ms
- Integration period: 1s, 6s, 30s, 60s, 5min
- Memory capacity: 1Mbyte
- Serial interface: RS-232
- Integration period.....duration in days:
 - 1s.....5 (**XL421**) 1,5 (**XL422**)
 - 6s.....34 (**XL421**) 8 (**XL422**)
 - 30s.....170 (**XL421**) 42 (**XL422**)
 - 60s.....364* (**XL421**) 91 (**XL422**)
 - 5min1820* (**XL421**) 455* (**XL422**)
- Front panel indication: LED diodes
- Power supply: 2x1.5V batteries type AA LR6
- Battery life: >6months (with loaded batteries)
- Safety: IEC/EN 61010-1
- Measurement category: CAT IV 600V (to earth)
- Insulation: Double insulation
- Pollution level: 2
- Mechanical protection index: IP65
- Max height: 2000m
- Max diameter of flex clamps: 174mm
- Size (LxWxH): 120x80x43 mm
- Weight (batteries included): approx. 0.5kg

* According to battery duration

Included accessories

VELCRO	Adhesive strap 50x70mm
TOPVIEW2004	Windows software for PC + serial cable C2004
BORSA 2000	Soft carrying bag (XL421)
BORSA75	Soft carrying bag (XL422)
	Batteries
	User Manual

Optional accessories

C2009	RS232-USB adapter
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Functions and characteristics

- TRMS single-phase voltage measurement (**XL423**)
- AC TRMS three-phase voltage measurement (**XL424**)
- Measuring range: 0 ÷ 600VAC
- Accuracy: ±(1.0%reading+1 digit)
- Resolution: 0,1V
- Operating frequency: 50±6Hz, 60±6Hz
- Bandwidth: 3200Hz
- Sampling frequency: 64 spots in 20ms
- Integration period: 1s, 6s, 30s, 60s, 5min
- Memory capacity: 1Mbyte
- Serial interface: RS-232
- Integration period.....duration in days:
 - 1s.....5 (**XL423**) 1,5 (**XL424**)
 - 6s.....34 (**XL423**) 8 (**XL424**)
 - 30s.....170 (**XL423**) 42 (**XL424**)
 - 60s.....364* (**XL423**) 91 (**XL424**)
 - 5min1820* (**XL423**) 455* (**XL424**)
- Front panel indication: LED diodes
- Power supply: 2x1.5V batteries type AA LR6
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- Safety: IEC/EN 61010-1
- Measurement category: CAT IV 600V (to earth)
- Insulation: Double insulation
- Pollution level: 2
- Mechanical protection index: IP65
- Max height: 2000m
- Size (LxWxH): mm 120x80x43
- Weight (batteries included): approx. 0.5kg

* According to battery duration

Included accessories

KITXL424C	Set of 4 alligator clips
VELCRO	Adhesive strap 50x70mm
TOPVIEW2004	Windows software for PC + serial cable C2004
BORSA2000	Soft carrying bag
	Batteries and User Manual

Optional accessories

C2009	RS232-USB adapter
606-IECN	Connector with magnetic terminal