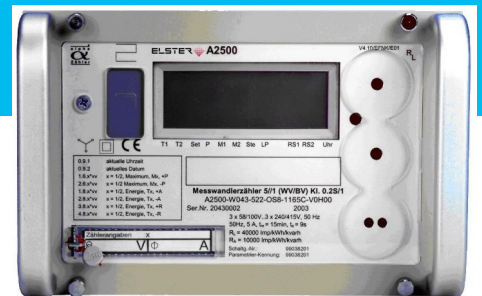


High precision rack mounted meter *alpha* A2500

Electronic rack mounted meter for high precision measurements

With the deregulation of the energy market, in combination with a changing cost situation, new flexible tariff structures and a modern energy management are required. Remote metering and the standardization process become more and more important. With the adaptation of the *alpha* meter A2500, ELSTER Messtechnik has created the conditions to match these new requirements.

The *alpha* meter is available either for CT connection and CT/VT connection. The meter is in accordance with the relevant EN and IEC standards and follows the requirements of VDEW V2.1 for electronic electricity meters.



Features

- Housing with special Essailec connectors
- wide voltage range power supply
→ same meter can be used at all nominal voltages
- available for 3-wire and 4-wire applications
- high accuracy and stability
- display according to the VDEW-specification
- reduction of the certification time by using the efficient test mode
- 4-quadrant measurement (+P, -P, +Q, -Q, Q1..Q4)
- 4 energy and 4 demand tariffs, independently controllable
- measurement of active, reactive and apparent demand
- integrated tariff clock
- time back-up with internal super-cap or battery
- time synchronization by connection of a DCF77 antenna
- readout of load profile data according to VDEW specification by use of EN62056-21 protocol
- improved load profile storage ability
 - 13 months of 15minute intervals
 - selectable up to 8 channels
 - different storage modes (demand, energy/interval, register data)
 - load profile for pulse inputs
- log file for registration of all events with time stamps
- registration of instrumentation values
- 4 electronic control inputs
- 6 electronic pulse/control outputs
- 1 mechanical relay output (option)
- up to 3 pulse inputs (option)
- auxiliary power supply (option)
- user friendly reading, setting and programming tool *alpha*SET



Nominal voltage	4-wire meter 3-wire meter (Aron)	3x58/100V...3x240/415V 3x100V...3x240V Wide range power supply (+/-20% Un),
Nominal frequency		50 / 60Hz or 16.66Hz
Nominal (max) current		5//1, 1(2)A, 5(6)A, 5(15) other current ranges available
Accuracy		Class 0,5S and 0,2S
4 control inputs	Control voltage Threshold	max. 276V AC „OFF“ at <=47V/AC; <=66V/DC „ON“ at <=65V/AC; <=91V/DC
6 electronic outputs - pulse output or - control output	AC and DC voltage Voltage range Current range	5V to < 276V AC/DC < 100mA AC/DC
1 mech. relay output	Life expectancy Max. switching voltage Max. current	10 ⁷ operations 265V AC/DC 1Amp
3 pulse inputs	Pulse or synchronization input Connection to external DCF77- antenna possible	S0-standard, according to DIN 43864
Interfaces	Optical interface CL0- interface or RS232-/RS485 interface	According to EN62056-21 Protocol according to EN62056-21 300...19,200 Baud
Time backup for RTC	Supercap Battery	> 10 days > 10 years
Auxiliary power supply	Wide range power supply	48V...230 AC/DC +/-15%
Temperature condition	Operating temperature Storage temperature Humidity	-25°...+60 °C -40°...+70 °C acc. to EN62052-11
EMC-compatibility	Surge (1,2/50µs)	6kV, R _{source} = 2 Ohm, 12kV, R _{source} =40 Ohm *) 4kV AC, 1min, 50Hz
Power consumption	Voltage circuit Current circuit Auxiliary power supply	< 0,8W, <1,2VA per phase < 0,01W, <0,01VA per phase < 2,3W, < 5,3VA
Connections		Essailec connectors Withdrawable under power
Housing		19 inch rack mounted version, metal box
Weight		< 4kg

*) only between main terminals

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