



ES Series Single Phase Energy Meters

The ES Series measures active energy consumption directly and accurately in single phase systems and shows total active energy consumption.

The most important features of the series are **reliability, affordability, small size, and easy installation.**

It can send energy consumption information to the pulse collectors and other devices with digital inputs through its pulse output.

Via the version with RS-485 Modbus interface other parameters such as **voltage, current and active power** can be monitored remotely.

- 32A, 45A and 80A versions
- Direct connection without current transformer
- Class 1 - Active Energy measurement
- MID-approved measurement standard (Optional)
- Sealable terminal block
- RS-485 Modbus communication and energy pulse output options



MID



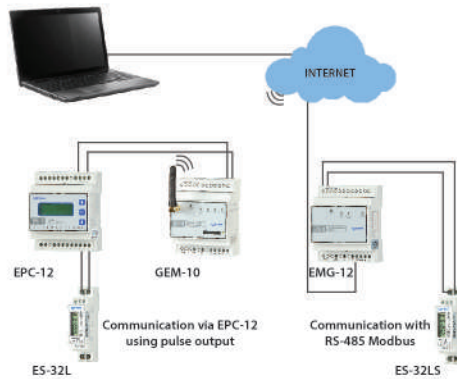
Usage Areas

- Shopping malls
- Airports
- Railway Stations
- Factories
- Building Complexes
- Malls
- Hospitals
- Schools
- Holiday Villages
- Marinas
- Industrial Exhibition Halls
- Hotels

ES-32L/ES-45L / ES-32LS/ES-45LS Maximum 80A ES-80L / ES-80LS

SPECIFICATIONS

	ES-32LS	ES-32L	ES-45L	ES-45LS	ES-80LS	ES-80L
ENCLOSURE						
Protection Class	IP51					
Weight	60gr/pcs.			60gr,74gr (with CT-80D)/pcs.		
Display	6+1 digit LCD					
MEASUREMENTS						
Active Energy Range	0-999999.9 kWh					
Accuracy	± 1% Class 1					
Nominal Current	In=5A			In=40A		
Starting Current	0,02A			0,08A		
Minimum Current	0,25A			0,8A		
Transfer Current	0,5A			2A		
Highest Current	32A			80A		
Burden (Input Load)	0,5 VA					
Surge Voltage Test	4kV 1.2/50 ms IEC 1000-4-5					
Burst Test	4kV IEC 61000-4-4					
SUPPLY						
Operating Voltage	230 VAC - 20%+15%					
Operating Frequency	50/60 Hz					
Power Consumption	<2W					
INPUT/OUTPUT STRUCTURE						
Pulse Output	-	1000Imp./kWh			-	1000Imp./kWh
Pulse Width	-	Ti=20ms.			-	Ti=20ms.
AMBIENT CONDITIONS						
Operating Temperature	-25 / +55°C					
Over Voltage Category	III					
Pollution Degree	xII					
Type	Indoor					
Ambient Humidity	90%					
STANDARDS						
Applied Standards	EN 62052-11, EN 62053-21					
Applied Certificates	MID measurement certificate					
CONNECTIONS						
Mounting	Rail Mounting DIN En50022					
Connection Terminals	Screw type					
COMMUNICATION						
Communication Interface/ Protocol	RS-485 / MODBUS RTU			RS-485 / MODBUS RTU		



HEADQUARTERS

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