

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



ES-32L/ES-45L / ES-32LS/ES-45LS

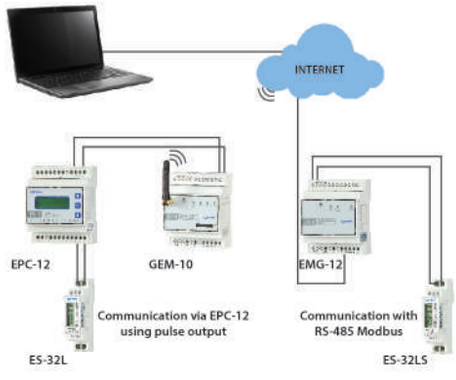
ES-80L / ES-80LS

Usage Areas

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

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		45A		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		-



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