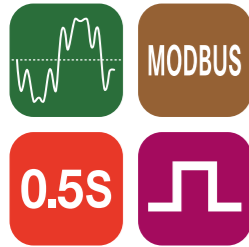
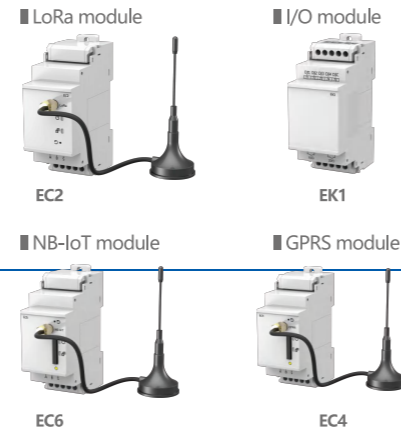


PD194Z-E20



Harmonics
Modbus Interface
Energy Accuracy 0.5S
Pulse Output



FUNCTION

Networks

-TN, TT, IT networks

Communication

-Interface: RS485
-Protocol: Modbus-RTU
-LoRa
-NB-LoT
-GPRS

Accuracy

-Energy: 0.5S
-Voltage: 0.2%
-Current: 0.2%



MAIN FEATURES

Measuring

-Fundamental V/A
-Demand
-Max./Min. Value

Power Quality

-THD
-Harmonics up to 31st
-Sequence component
-Unbalance
-Crest factor and K factor

Energy Metering

-Bi-directional energy
-Four-quadrant reactive energy
-Tariff energy
-Fundamental energy



APPLICATIONS



Data Acquisition



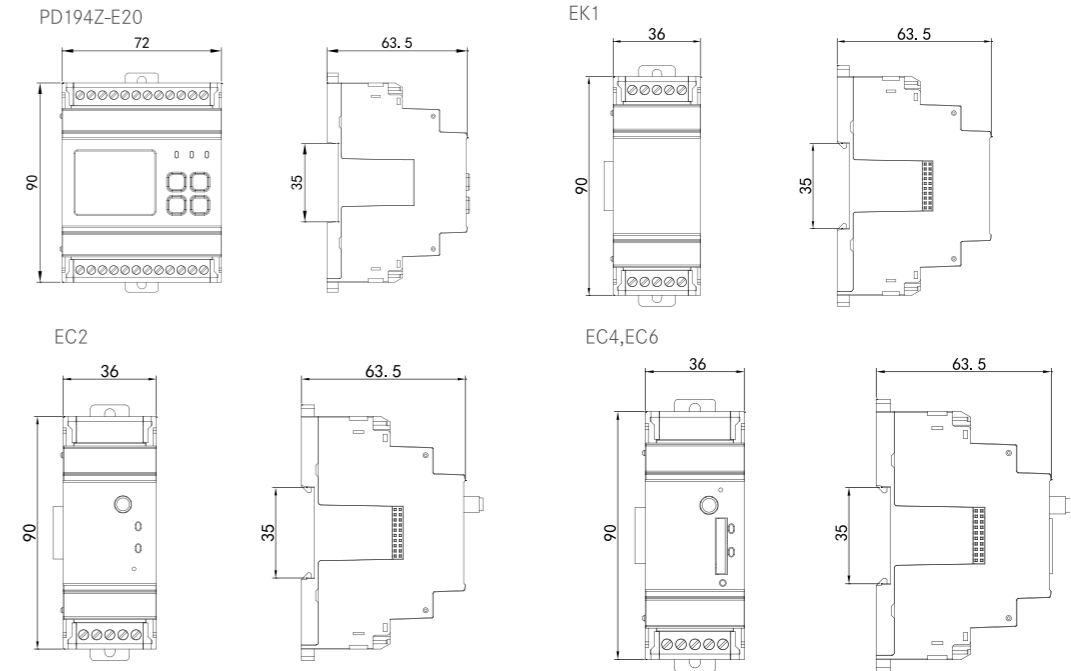
Energy Management



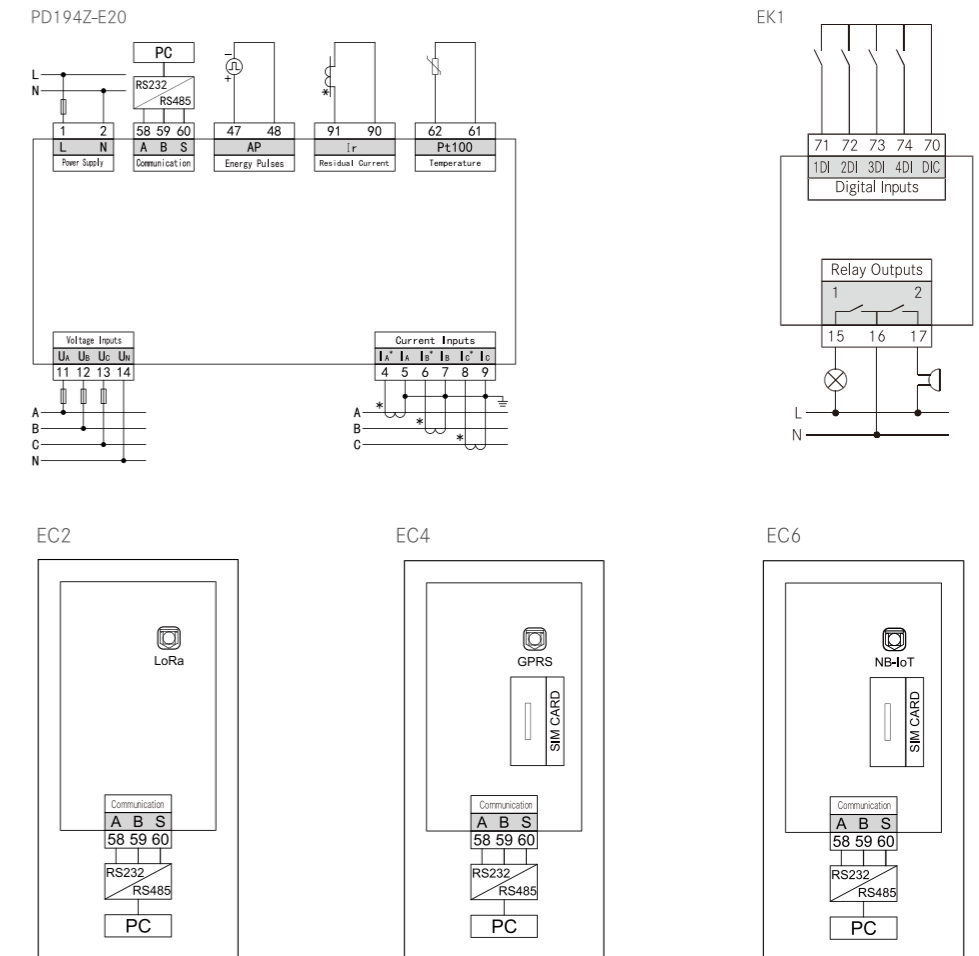
Remote Power Monitoring



DIMENSIONS



TYPICAL WIRING

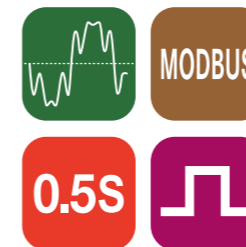




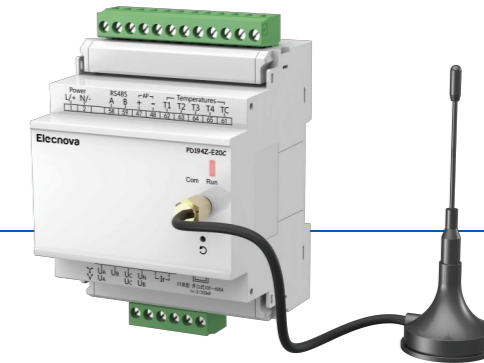
TECHNICAL SPECIFICATION

Display Mode		LCD
Accuracy	V/A	0.2%
	P/Q/S/PF	0.5%
	F	±0.01Hz
	±kWh	Class 0.5S
	±kvarh	Class 2
Voltage Input	Rated value	AC 100V, AC 380V
	Overload	Continuous: 1.2Vn Instantaneous: 2Vn/10s
	Burden	≤0.1VA (per phase)
	Impedance	≥1.7MΩ
	Frequency	45Hz~65Hz
Current Input	Rated value	AC 1A, AC 5A
	Overload	Continuous: 1.2In Instantaneous: 2In/5s
	Burden	≤0.2VA (per phase)
	Impedance	≤20mΩ
Residual Current Input		AC 1mA
Temperature Measurement		PT100
Auxiliary Power Supply	Working range	AC 80~270V 50/60Hz, DC 100~350V
	Consumption	≤5VA
Communication Port		RS485, Modbus-RTU, 2-wire, up to 9600bps
	LoRa, EC2 module	470MHz
	GPRS, EC4 module	850/900/1800/1900MHz
	NB-IoT, EC6 module	Band 3/5/8
Energy Pulse Output		1 photocoupler output, pulse width (80±20%) ms
Optional Module (EK1)	Digital inputs	Dry digital inputs, Isolation: ≥2kVAC
	Relay outputs	Contact rated at AC 250V/5A or DC 30V/5A
Environment Conditions	Operating temperature	-25 C ~70 C
	Storage temperature	-30 C ~80 C
	Relative humidity	≤93%
	Altitude	≤2500m
Insulation		≥ 2kVAC

PD194Z-E20C/D/E



Harmonics
Modbus Interface
Energy Accuracy 0.5S
Pulse Output



DEVICES



FUNCTION

Networks

-TN, TT, IT networks

Communication

-RS485 : Modbus-RTU
-LoRa
-NB-IoT
-GPRS

Accuracy

-Energy: 0.5S
-Voltage: 0.2%
-Current: 0.2%



MAIN FEATURES

Measuring

-Fundamental V/A
-Demand
-Max./Min. Value

Power Quality

-THD
-Harmonics up to 31st
-Sequence component
-Unbalance
-Crest factor and K factor

Energy Metering

-Bi-directional energy
-Four-quadrant reactive energy
-Tariff energy
-Fundamental energy



APPLICATIONS



Data Acquisition



Energy Management

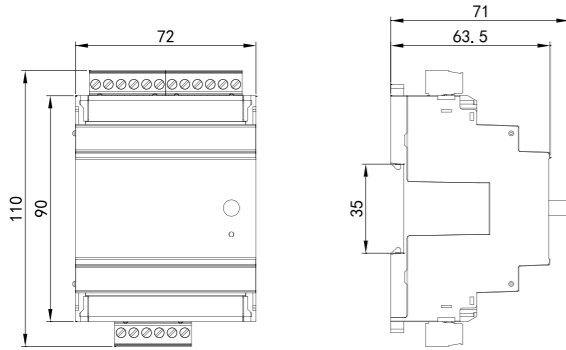


Remote Power Monitoring



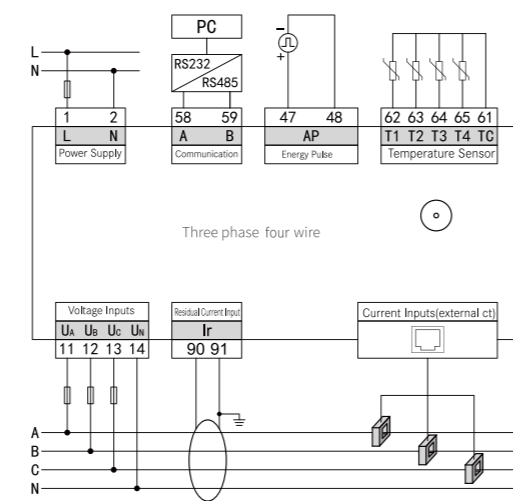
DIMENSIONS

PD194Z-E20C/D/E



TYPICAL WIRING

PD194Z-E20C/D/E



TECHNICAL SPECIFICATION

Model		PD194Z-E20C	PD194Z-E20D	PD194Z-E20E
Accuracy	V/A	0.2%		
	P/Q/S/PF	0.5%		
	F	±0.01Hz		
	±kWh	Class 0.5S		
	±kvarh	Class 2		
Voltage Input	Rated value	AC 100V, AC 380V		
	Overload	Continuous: 1.2Vn Instantaneous: 2Vn/10s		
	Frequency	45Hz~65Hz		
Current Input	Rated value	External CT		
	Overload	Continuous: 1.2In Instantaneous: 2In/5s		
Residual Current Input		AC 1mA		
Temperature measurement		PT100		
Auxiliary Power Supply	Working range	AC/DC 80~270V 50/60Hz		
	Consumption	≤5VA		
Communication Port	RS485	Modbus-RTU, up to 9600bps		
	LoRa	-	-	470/868/915MHz
	GPRS	850/900/ 1800/1900MHz	-	-
	NB-IoT	-	Band 3/5/8	-
Energy Pulse Output		1 photocoupler output, pulse width (80±20%) ms		
Environment Conditions	Operating temperature	-25 C ~ 70 C		
	Storage temperature	-30 C ~ 80 C		
	Relative humidity	≤93%		
	Altitude	≤2500m		
Insulation		≥ 2kVAC		

LNF53/56/58

This series of multi-functional power meters support all-parameter measurement, bi-directional energy metering, four-quadrant reactive metering and harmonic analysis. They can be connected to power monitoring system and energy management system to realize remote data monitoring.



Ultra-thin Design
Bracket Free Installation
LCD Display
High-level Protection



FUNCTION

Networks

-TN, TT, IT networks

Communication

-Interface: RS485
-Protocol: Modbus-RTU

Accuracy

-Energy: 0.5S
-Voltage: 0.2%
-Current: 0.2%

Power Quality(LNF58)

-THD
-Harmonics up to 15th
-Unbalance