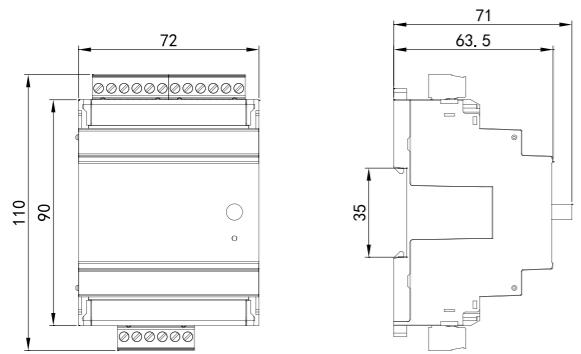




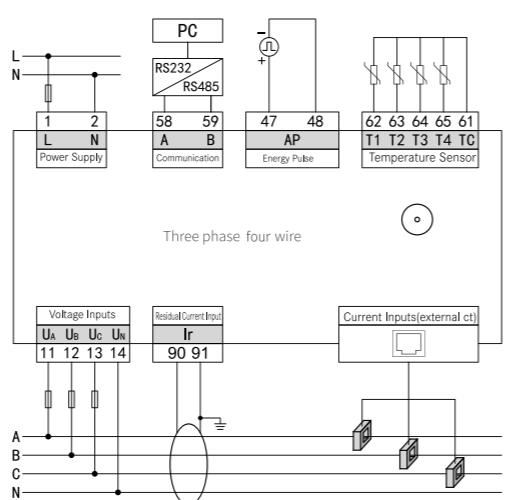
## DIMENSIONS

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 $\pm 0.01\text{Hz}$
	$\pm \text{kWh}$ Class 0.5S	$\pm \text{kvarh}$ 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 $\leq 5\text{VA}$	
Communication Port	RS485 Modbus-RTU, up to 9600bps	LoRa GPRS NB-IoT	470/868/915MHz 850/900/ 1800/1900MHz Band 3/5/8
Energy Pulse Output	1 photocoupler output, pulse width (80±20%) ms		
Environment Conditions	Operating temperature $-25^\circ\text{C} \sim 70^\circ\text{C}$	Storage temperature $-30^\circ\text{C} \sim 80^\circ\text{C}$	
	Relative humidity $\leq 93\%$		
	Altitude $\leq 2500\text{m}$		
Insulation			$\geq 2\text{kVAC}$

# 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)

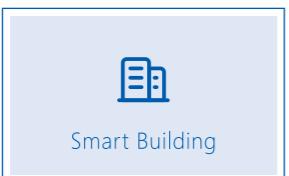
-THD  
-Harmonics up to 15th  
-Unbalance



## APPLICATIONS



Intelligent Device



Smart Building

INC  
Industrial and  
Mining Enterprise

Public Facilities



## MODEL SELECTION



	LNF53	LNF56	LNF58	
Dimension(mm)	72×72×44.5	96×96×34	96×96×34	
Real-time measurement	U/I/P/Q/S/F/PF	■	■	■
	Demand	■	■	■
Energy metering	Bi-directional energy	■	■	■
	Four-quadrant reactive energy	■	■	■
Power quality monitoring	Unbalance	■	■	■
	THD	-	-	■
	2nd ~ 15th harmonic content	-	-	■
Input & output	Energy pulse	1	1	2
	RS485 communication interface	1	1	1
	Digital input	-	-	2
	Relay output	-	-	2

Note: "■" Yes, "—" No, "□" Optional



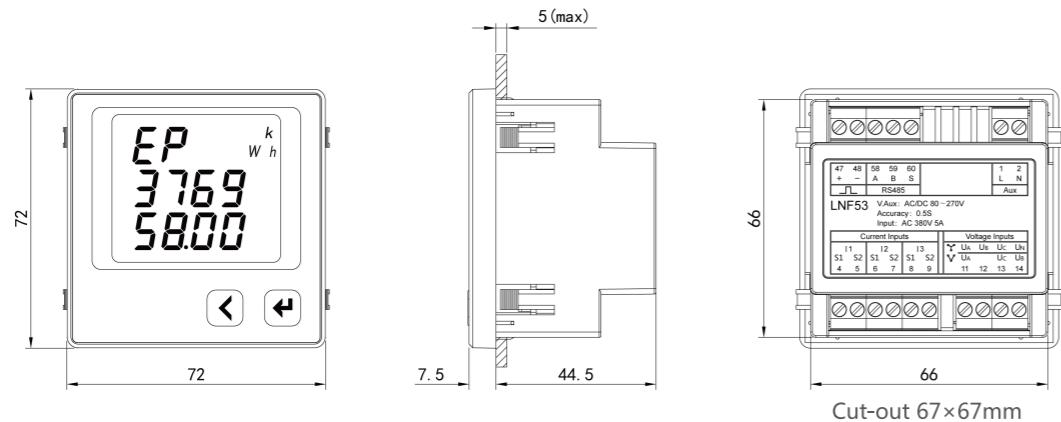
## TECHNICAL PARAMETER

Item	Parameter	
Accuracy	Voltage, current: 0.2%; Power: 0.5%; Frequency: +0.01Hz; Active energy: 0.	
Display Data Update Time		1s
	Voltage	Rated voltage
		AC100V/AC380V
	Overload	Continuous: 1.2 Vn, instantaneous: 2 Vn/1min
	Energy consumption	≤0.1VA
Signal Input	Rated voltage	1A/5A
	Current	Overload
		Continuous: 2In, instantaneous: 10In/5s
	Energy consumption	≤0.2VA
	Frequency	45~65Hz
Communication	RS485 interface	Modbus-RTU protocol, baud rate up to 9600bps
Energy Pulse		Optocoupler isolation, pulse width 80ms+20%
Digital Input		Optocoupler isolation, passive dry contact
Relay Output		Contact capacity AC250V 5A or DC 30V 5A
Power Supply	Working range	AC/DC 80 ~ 270V
	Energy consumption	≤5VA
Environment Condition	Working temperature	-10°C ~ 55°C
	Storage temperature	-25°C ~ 70°C
	Relative humidity	≤93%RH
	Altitude	≤2500m
Safety	Insulation	Signal, power supply, output terminals to case resistance≥100MΩ
	Withstand voltage	Power supply, input and output≥2kV
Protection Level		IP54

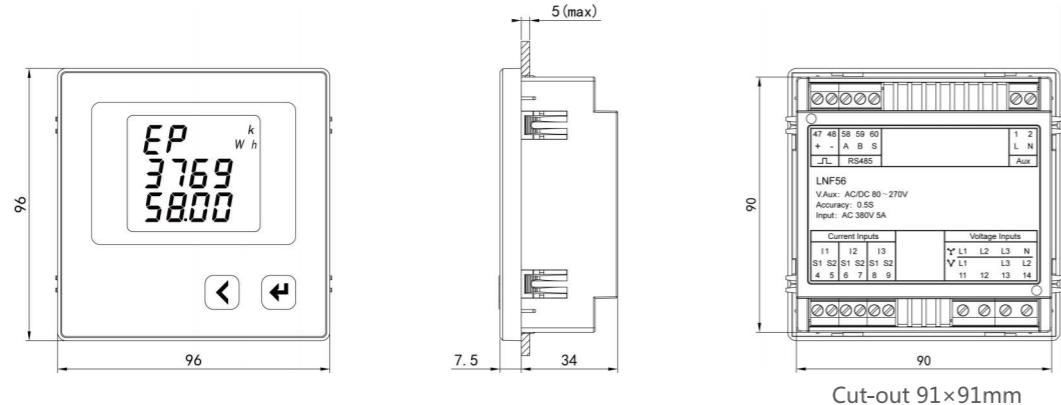


## DIMENSION

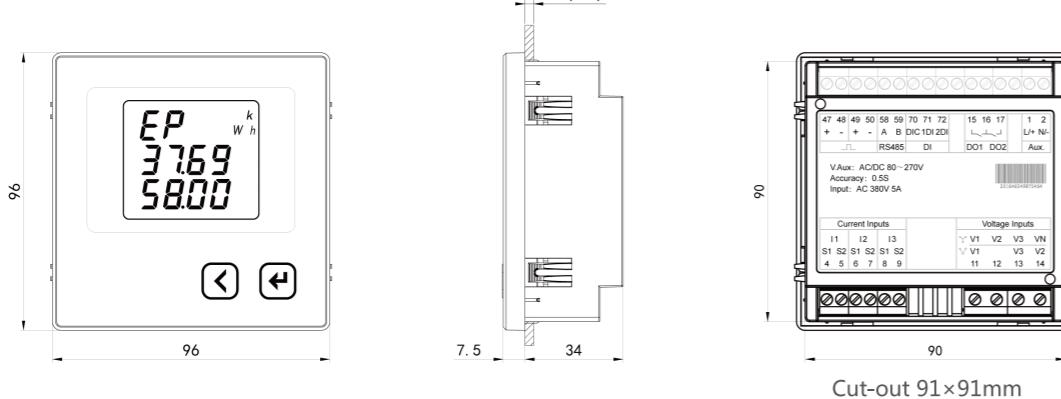
LNF53



LNF56

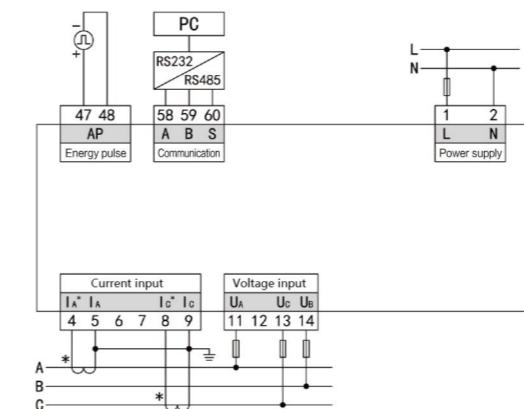


LNF58

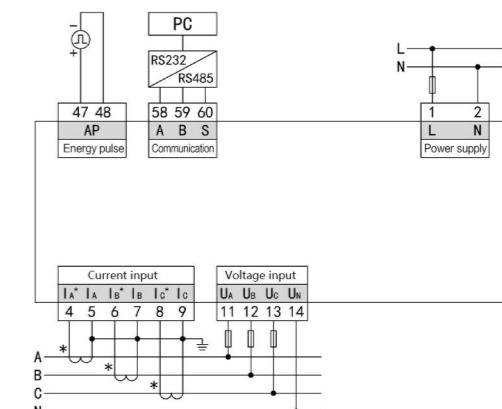


## TYPICAL WIRING

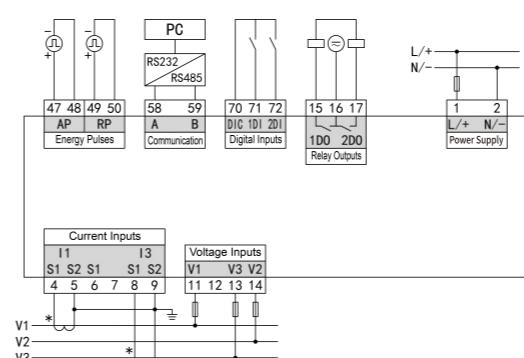
LNF53/LNF56 (3P3W)



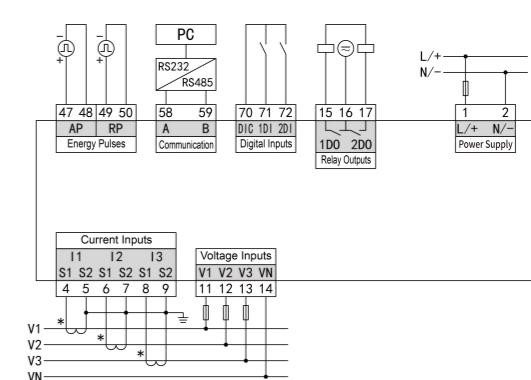
LNF53/LNF56 (3P4W)



LNF58 (3P3W)



LNF58 (3P4W)



## ORDER SAMPLE

Model LNF56

Signal input AC380V, AC1000/5A

Wiring mode Three phase four wire

Other Factory default setting (Please specify special parameters such as frequency and power supply when ordering)