

TS SERIES

Smart Power Meters

Measurement. Communication. Control.



Multifunction Network | AC Measurement | DC Measurement

PRODUCT CATALOG

Designed for panel builders, energy systems and industrial OEM applications

One platform for panel-level power measurement

The TS Series combines electrical measurement, local display and flexible communications in a compact panel-mounted format. It supports utility panels, industrial distribution, renewable-energy systems and OEM equipment.

PRODUCT FAMILIES

01 Multifunction Network Power Meters

Three-phase electrical parameters, energy, harmonics, pulse and RS485.



02 AC Measurement Meters

Single- or three-phase voltage, current, frequency and power factor.



03 DC Measurement Meters

DC voltage or current for DC panels, solar power and telecom systems.



MANUFACTURER

Jiangsu ACXION Electric Co., Ltd.

Jiangsu ACXION Electric Co., Ltd. develops and manufactures smart electrical instruments and industrial control components for OEMs, panel builders and power-system partners. From its 18,800 m² production base in Jiangyin, ACXION integrates product engineering, manufacturing and quality assurance. Strategic investment from Phoenix Contact (China) in 2017 further strengthened its engineering and international-market capabilities.

CONTENTS

03 Multifunction 04 AC meters 05 DC meters 06 Selection 07 Wiring 08 Dimensions & contact

Multifunction network power meters

For three-phase low- and medium-voltage systems requiring complete parameter monitoring, energy metering, harmonics and network communications.



MODEL DESIGNATION

TS 72 Y - E3 / J1 + K2 + M1

Frame | LCD display | multifunction / 3-phase | relay + digital input + analog output

MEASUREMENT AND OUTPUTS

Measured values	3-phase current and voltage; active, reactive and apparent power; frequency; power factor
Energy & harmonics	Bidirectional active energy; four-quadrant reactive energy; 2nd to 31st harmonic analysis
Current / voltage input	CT secondary AC 1 A or 5 A; PT secondary or direct voltage 57.7/100 V or 220/380 V
Communication	RS485, Modbus-RTU; 2400 / 4800 / 9600 default / 19200 bps
Standard outputs	1 active-energy pulse output and 1 RS485 port
Optional expansion	1-2 relays; 2-4 digital inputs; 1-3 analog outputs, 4-20 mA or 0-20 mA
Accuracy	Current & voltage Class 0.2; power and active energy Class 0.5; reactive energy Class 1
Supply / environment	AC/DC 80-270 V, ≤5 VA; -10°C to +55°C operating; altitude ≤2500 m

AVAILABLE FORMATS

LED display

TS72-E3/□
TS80-E3/□
TS96-E3/□

LCD display

TS72Y-E3/□
TS80Y-E3/□
TS96Y-E3/□

Bezel / cutout (mm)

72 x 72 / 68 x 68
80 x 80 / 76 x 76
96 x 96 / 91 x 91

AC measurement meters

Programmable AC meters for single- and three-phase voltage, current, frequency and power-factor measurement, with optional communications and control I/O.



MODEL DESIGNATION

TS 96 - 4 H 3 / C1 + J1

Frame | LED display | AC input | current + voltage + power factor / 3-phase | RS485 + relay

TECHNICAL SPECIFICATIONS

Wiring	Single-phase, three-phase three-wire or three-phase four-wire
Frequency	45-65 Hz
Voltage input	PT secondary or direct input; rated 57.7/100 V or 220/380 V; burden <0.2 VA
Current input	CT secondary AC 1 A or 5 A; continuous overload 1.2 x rated; burden <0.2 VA
Display	LED
Options	RS485; 1-2 relay outputs; 2-4 digital inputs; 1-3 analog outputs
Accuracy	Class 0.5
Supply / insulation	AC/DC 80-270 V, ≤5 VA; power, input and output insulation > AC 2 kV

FUNCTION CODES

I1 / I3

Single-phase / three-phase current

U1 / U3

Single-phase / three-phase voltage

F1 / F3

Voltage and frequency

H1 / H3

Current, voltage and power factor

Panel formats

48 x 48 | 72 x 72 | 80 x 80 | 96 x 96 | 96 x 48 mm
Model availability is summarized on page 06.

DC measurement meters

Designed for DC distribution panels, solar-power systems and telecom base stations. Measured values can be transmitted via analog output or RS485 Modbus-RTU.



MODEL DESIGNATION

TS 96B - 5 I / C1 or M1

Frame | LED display | DC input | current measurement | choose C1 (RS485) or M1 (one analog output)

TECHNICAL SPECIFICATIONS

Voltage input	Direct DC input, 0-1000 V; continuous overload 1.2 x rated; burden <1 VA
Current input	External 75 mV shunt or Hall input, DC 4-20 mA
Display	LED
Communication	RS485 Modbus-RTU; 2400 / 4800 / 9600 default / 19200 bps
Digital I/O	2 or 4 dry-contact inputs; 1 or 2 normally-open relay outputs
Analog output	1, 2 or 3 channels; 4-20 mA or 0-20 mA
Accuracy	Current and voltage Class 0.5
Supply / environment	AC/DC 80-270 V, ≤5 VA; -10°C to +55°C operating; ≤93% RH, non-condensing

AVAILABLE MODELS

72 x 72 mm

TS72-5I/□
TS72-5U/□

80 x 80 mm

TS80-5I/□
TS80-5U/□

96 x 96 mm

TS96-5I/□
TS96-5U/□

96 x 48 mm

TS96B-5I/□
TS96B-5U/□

Product selection and option codes

Use the model matrix to identify display, panel format and measured function. The □ suffix is replaced by the required expansion code(s).

MULTIFUNCTION NETWORK POWER METERS

Format	Display	Models
72	LED / LCD	TS72-E3/□ TS72Y-E3/□
80	LED / LCD	TS80-E3/□ TS80Y-E3/□
96	LED / LCD	TS96-E3/□ TS96Y-E3/□

AC MEASUREMENT METERS

48	TS48-4I1/□, TS48-4I3/□, TS48-4U1/□, TS48-4U3/□
72	TS72-4I1/□, -4I3/□, -4U1/□, -4U3/□, -4F1/□, -4F3/□, -4H1/□, -4H3/□; TS72Y-4I1/□, -4I3/□, -4U1/□, -4U3/□
80	TS80-4I1/□, -4I3/□, -4U1/□, -4U3/□, -4F1/□, -4F3/□, -4H1/□, -4H3/□; TS80Y-4I1/□, -4I3/□, -4U1/□, -4U3/□
96	TS96-4I1/□, -4I3/□, -4U1/□, -4U3/□, -4F1/□, -4F3/□, -4H1/□, -4H3/□; TS96Y-4I1/□, -4I3/□, -4U1/□, -4U3/□
96B	TS96B-4I1/□, TS96B-4I3/□, TS96B-4U1/□, TS96B-4U3/□

DC MEASUREMENT METERS

72	TS72-5I/□ TS72-5U/□	80	TS80-5I/□ TS80-5U/□
96	TS96-5I/□ TS96-5U/□	96B	TS96B-5I/□ TS96B-5U/□

EXPANSION CODES

C1

1 x RS485

J1 / J2

1 / 2 relay outputs

Y

LCD display

K2 / K4

2 / 4 digital inputs

M1 / M2 / M3

1 / 2 / 3 analog outputs

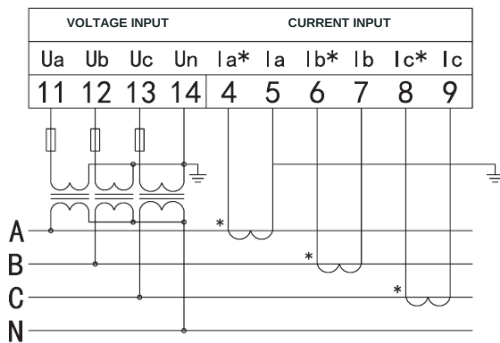
Compatibility note: available combinations depend on frame size and terminal capacity.
For TS96B DC meters, C1 and M1 are mutually exclusive. Confirm the required option before ordering.

Typical wiring and signal input

Representative connection arrangements are shown below. Terminal availability depends on the selected model and expansion configuration.

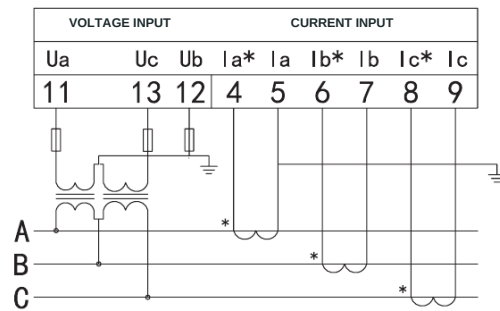
Three-phase four-wire (3PT, 3CT)

Multifunction network power meter



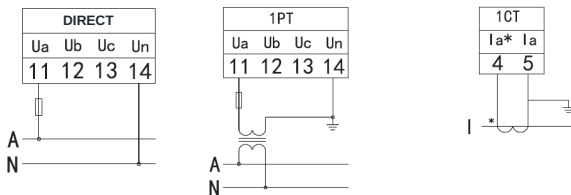
Three-phase three-wire (2PT, 3CT)

Multifunction network power meter



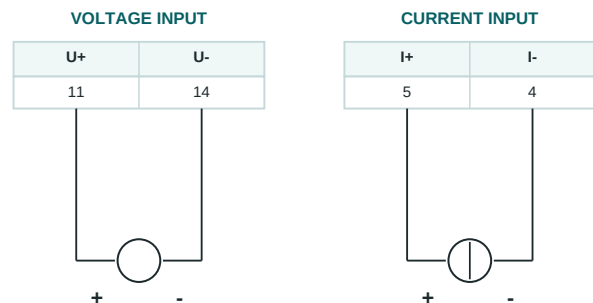
AC measurement inputs

Direct voltage, voltage via 1 PT, and current via 1 CT



DC signal inputs

Voltage input and current input are wired separately



AUXILIARY AND EXPANSION TERMINALS

Aux supply 1 L | 2 N

Energy pulse 46 AP | 47 N

RS485 58 A | 59 B

Relay outputs 28 DO1 | 29 COM | 31 DO2 | 32 COM

Analog outputs 15 AO- | 16 AO1 | 18 AO2 | 20 AO3

Digital inputs 70 DI- | 71 DI1 | 72 DI2
| 73 DI3 | 74 DI4

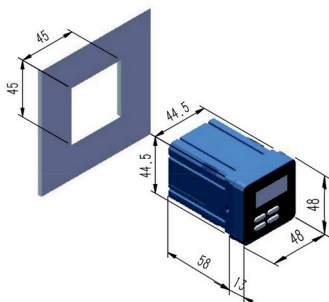
Commissioning note

Confirm CT polarity, PT ratio and terminal assignments before energizing.
The order-specific wiring diagram supplied with the product remains the final authority.

Panel formats and cutouts

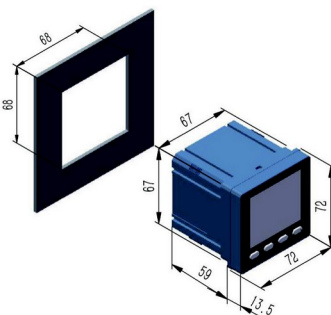
TS48

Bezel 48 x 48 mm | Cutout
45 x 45 mm



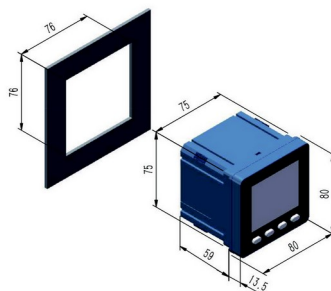
TS72

Bezel 72 x 72 mm | Cutout
68 x 68 mm



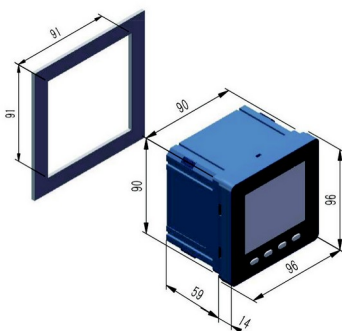
TS80

Bezel 80 x 80 mm | Cutout
76 x 76 mm



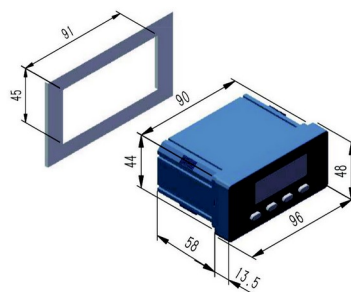
TS96

Bezel 96 x 96 mm | Cutout
91 x 91 mm



TS96B

Bezel 96 x 48 mm | Cutout
91 x 45 mm



Dimensions are in millimetres. Allow adequate rear clearance for terminals and wiring.



Open the Smart Future

Jiangsu Acxion Electric Co., Ltd.

MANUFACTURER

No.1057 Zhencheng Road, Lingang New City,
Jiangyin, Jiangsu, China

EXPORT CONTACT

TELEPHONE +86 15852658965

WHATSAPP +86 15852658965

E-MAIL acxionelectric@gmail.com

WEBSITE www.acxionelectric.com