

Product Specification Report

Supplier Name:		IGEN Tech Co., Ltd.	
Supplier Part No.:			
Product Name		Six-circuit Multi-function Meter	
Product Type:		DTSD422-D3-W	
Customer Name:			
Customer Part No.:			
Flow Package:			
Flow Part No.:			
Effective Date:			
Customer Approval		Supplier Approval	
Confirmed By	Approved By		

Version	Note	Updated Time	Updated By
1.0			

Introduction

Six-circuit Multi-function Meter is designed with advanced single chip processing system. It features in easy to install, high reliability and high accuracy. It can measure electricity consumption of two-circuit three-phase and adopt open-type CT. Without changing the original wiring, it can measure voltage, current, power, frequency, power factor, active energy data and etc.,

Embedded WiFi function enables plug and play.

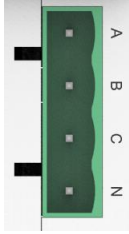
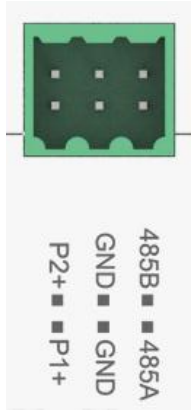
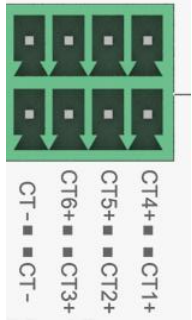
Features

1. Two-way measuring for consumption&production data
2. Measure two-circuit three-phase consumption@production data
3. Width: 36mm, standard DIN-Rail 35mm, easy to install
4. Open-type CT design
5. Embedded WiFi communication, compatible with SOLARMAN platform

Basic Parameter

Catalogue	Parameter	Value
Hardware Parameter	Remote Communication	WiFi
	Serial Communication	RS485
	Rated Voltage	3x230/400V
	Rated Current	6x5 (100) A
	CT Length	2m
	Rated Frequency	50/60Hz
	Accuracy	Active 1.0, Reactive 2.0
	Wiring Connection	Three-phase Four-circuit
	Start-up Current	≤0.004lb
	Consumption	≤3.5W
	Working Temperature	-25℃～+60℃
	Working Humidity	≤95% (No condensation)

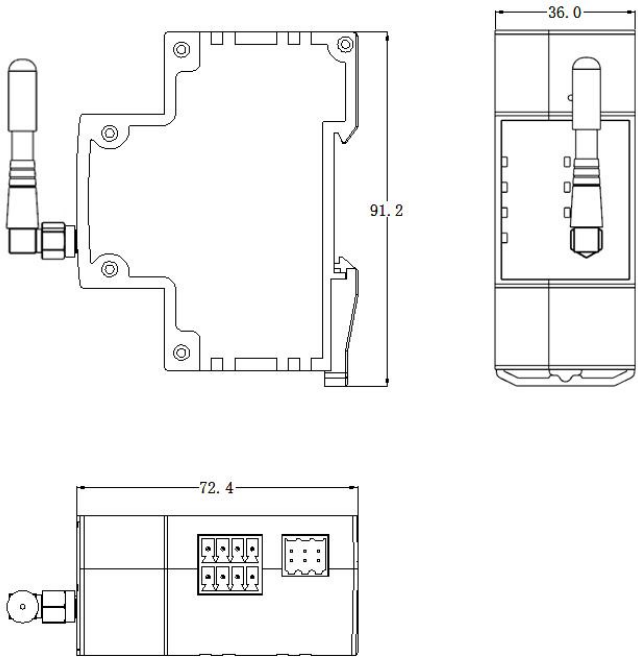
Interface Identification

Area		Picture	Description	Network Name	Type	Instruction
1	A		L-line A	-	AC Interface	Three-phase Power A Input
	B		L-line B	-	AC Interface	Three-phase Power B Input
	C		L-line C	-	AC Interface	Three-phase Power C Input
	N		N-line	-	AC Interface	Three-phase Power N Input
2	485B		RS485 B Receiving&Sendi ng Data	485B-	I/O	-
	485A		RS485 A Receiving&Sendi ng Data	485A+	I/O	-
	GND		GND	GND	Power	Power: GND
	GND		GND	GND	Power	Power: GND
	P2+		Active Pulse 2	Strong current interface		Baud rate: 2400 Check: Parity check Stop: 1 Data: 8
	P1+		Active Pulse 1	Strong current interface		
3	CT1+		CT 1+	CT1+	-	No.1 three-phase to P1
	CT2+		CT 2+	CT2+	-	
	CT3+		CT 3+	CT3+	-	
	CT-		CT GND	CT-	-	
	CT4+		CT 4+	CT4+	-	No.2 three-phase to P2
	CT5+		CT 5+	CT5+	-	
	CT6+		CT 6+	CT6+	-	
	CT-		CT GND	CT-	-	
4	RESET		Reset Key	RESET	-	Reboot or reset

Indicator Lights Instructions

No.	Light	Implication	Instruction
1	POWER	Meter Power (Green)	Flash: Normal status Off: No power
2	ALARM	Alert Light (Red)	Flash: Abnormal Off: No alert
3	P1	No.1 Three-phase Pulse (CT1, CT2, CT3) (Red)	Flash: Consumption
4	P2	No.2 Three-phase Pulse (CT4,CT5,CT6) (Red)	Flash: Consumption
5	COM	Communication status with WiFi module and meter (Green)	1.On: Module connected to meter 2.On 400ms/Off 1600ms : Module initializing 3.On 400ms/Off 400ms: Data transmitting 4.Off: Fail to communicate with meter
6	SER	Communication status with WiFi module and server (Green)	1.On: Module connected to server 2.On 400ms/Off 400ms : Module connected to router 3.Off: Fail to connect with router
7	NET	Logger running status (Green)	1.On 64ms/Off 2000ms: Normal running 2.On/Off: Abnormal running

Product Size&Picture (Unit: mm)



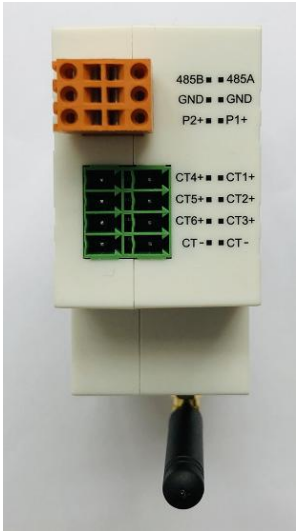
Front View



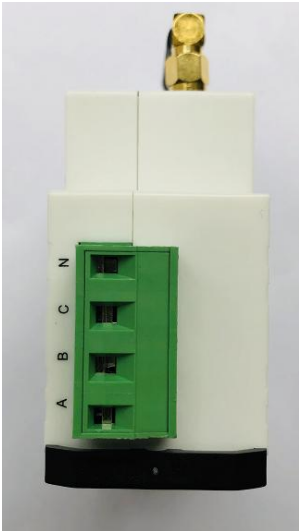
Left View



Right View



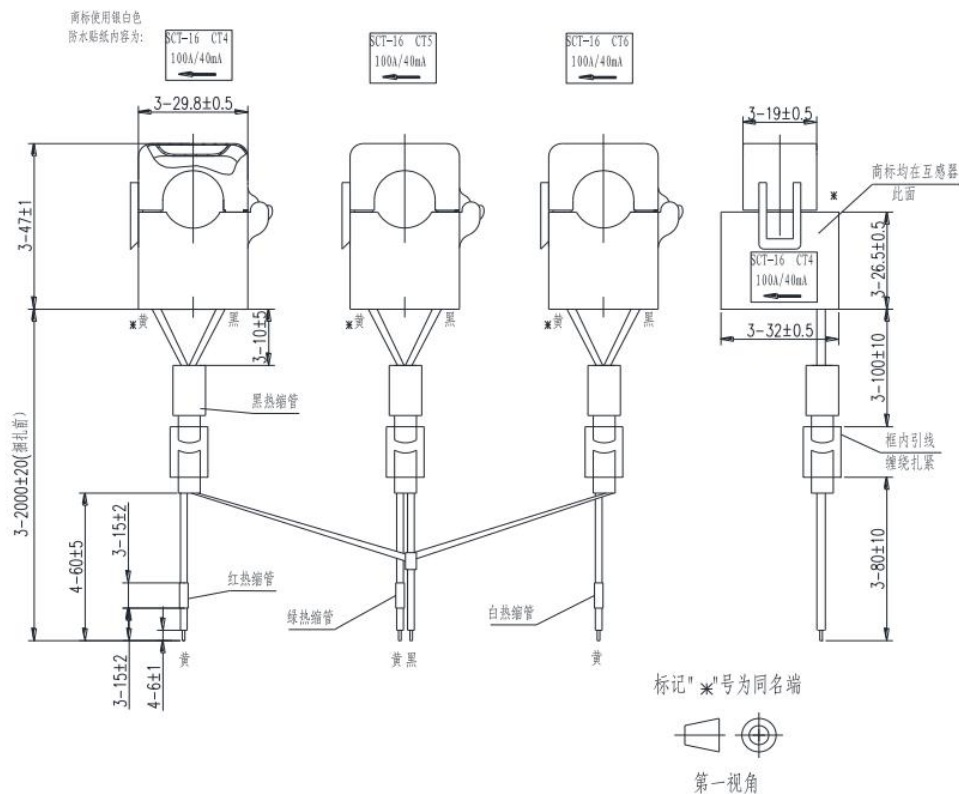
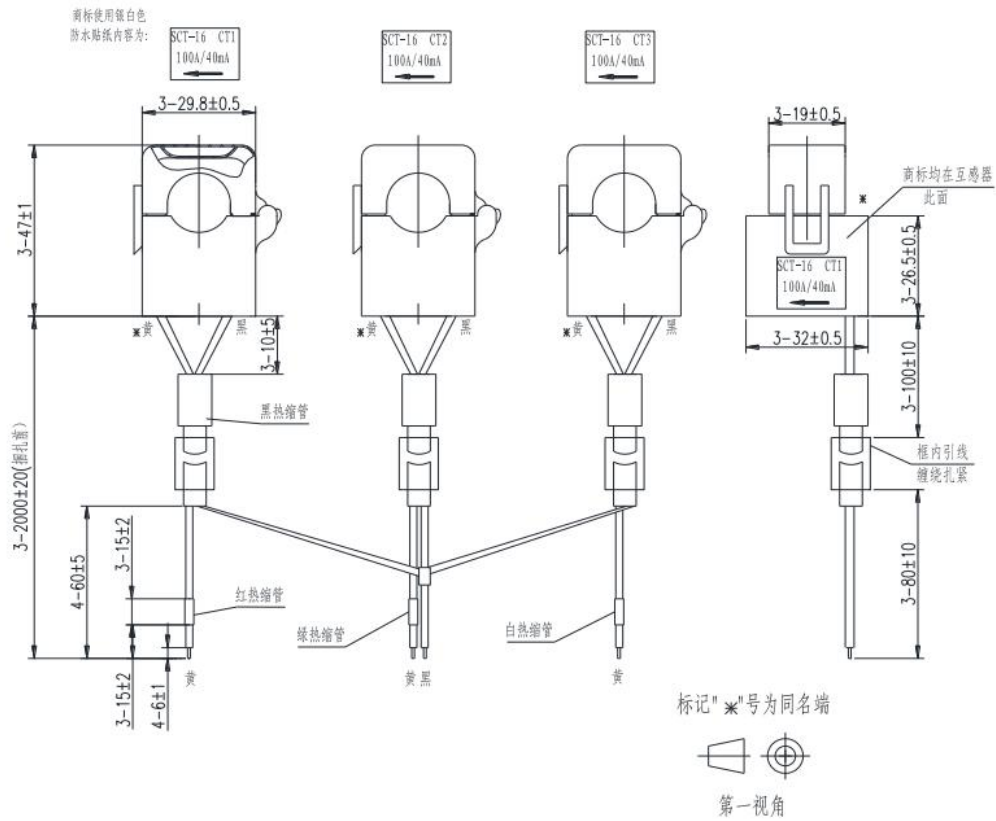
Top View



Bottom View

CT Size&Picture





CT Characteristic

	Value
Rated Frequency	50/60 Hz
Working Temperature	0°C ~ 40°C
Relative Humidity	≤95%
Rated Current I	100A

Rated Output Current I	40mA
Rated Load	20Ω
Accuracy	0.5
DC Component Even Harmonic	None
AC Withstand Voltage	Power frequency voltage (primary winding and secondary winding) 2.5KV/min, No breakdown, Arcing phenomenon, Leakage current < 1mA
Insulation Resistance	Primary winding and secondary winding ≥ 1000MΩ/500Vdc

Measuring Function

Voltage, frequency, split-phase current (CT1-CT6), power factor, total split-phase positive/negative power (CT1-CT6), total split-phase positive/negative energy (CT1-CT6)

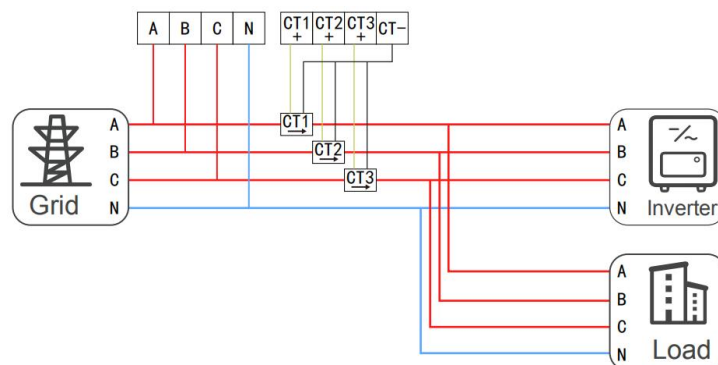
No.1 three-phase total positive/negative power (CT1-CT3), No.1 three-phase total positive/negative energy (CT1-CT3), No.1 three-phase total positive/negative reactive power (CT1-CT3), No.1 three-phase total positive/negative reactive energy (CT1-CT3)

No.2 three-phase total positive/negative power (CT4-CT6), No.2 three-phase total positive/negative energy (CT4-CT6), No.2 three-phase total positive/negative reactive power (CT4-CT6), No.2 three-phase total positive/negative reactive energy (CT4-CT6)

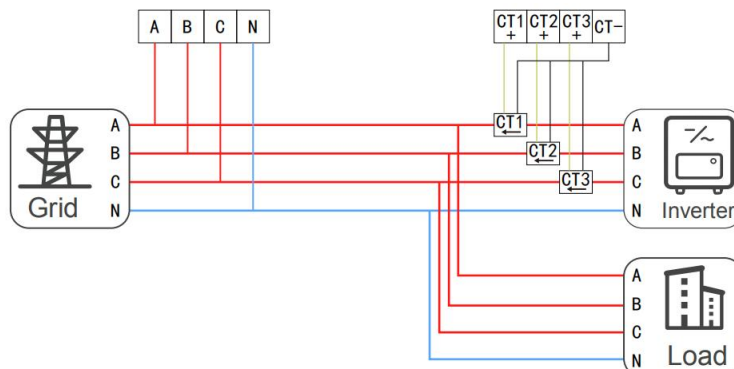
Measuring Scenario

One-circuit Three-Phase

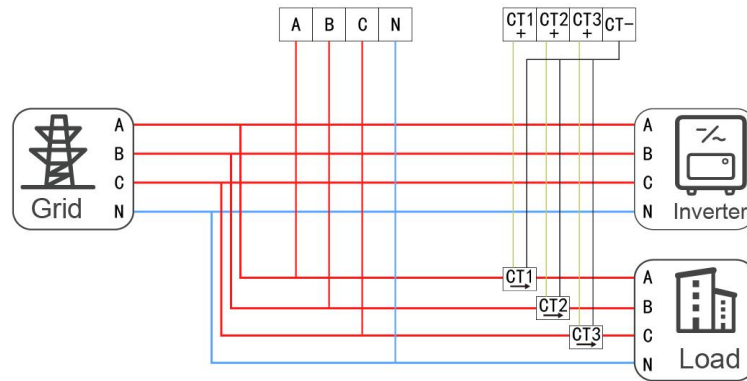
Installation position: Grid side



Installation position: Production side

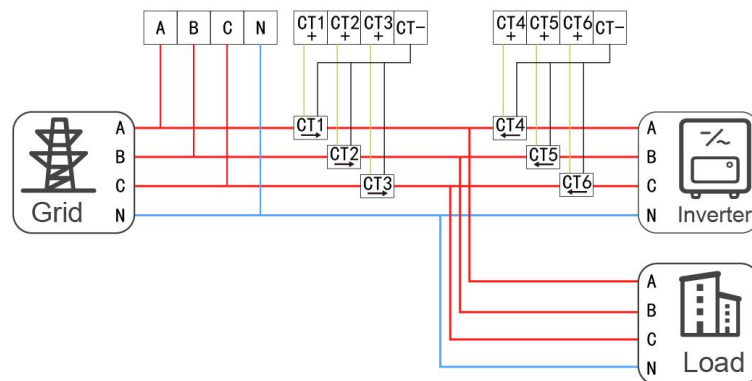


Installation position: Consumption side

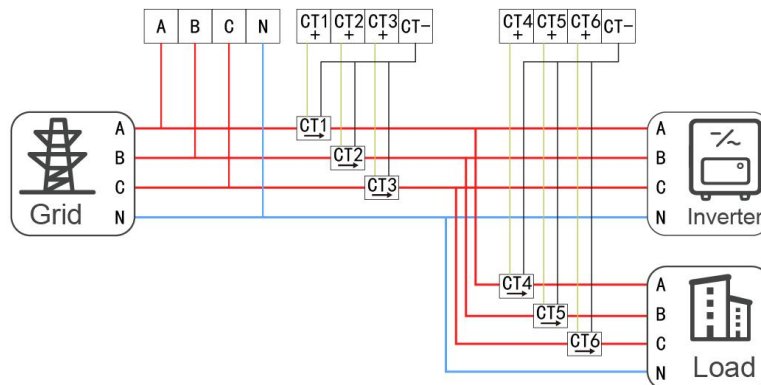


Two-circuit Three-Phase

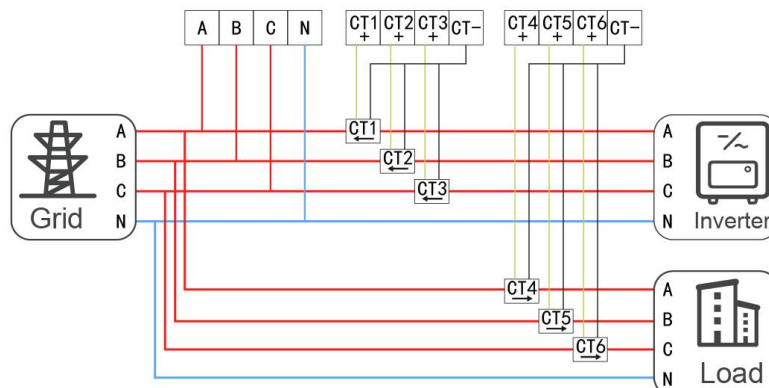
Installation position: Grid side+Production side



Installation position: Grid side+Consumption side



Installation position: Production side+Consumption side



Packing



Contact

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Product List

No.	Name	Quantity	Note
1	Six-circuit Multi-function Meter	1	--
2	100A CT	6	--