

Smart Current Transformer

Featuring LoRaWAN®

CT10x



CT10x is a LoRaWAN® Smart Current Transformer for monitoring the energy and analyzing consumption remotely. CT10x provides multiple current options to suit energy monitoring and support sending threshold alarms. The compact size and clamp design allow it to be installed in any indoor space quickly and safely without de-energizing a facility, simplifying the installation and saving the cost. Compliant with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, CT10x can be monitored via webpage or mobile App remotely.

CT10x is widely used for energy motoring and billing of smart buildings, machine failure detection and prevention, etc.

◆ Features

- Report the RMS current and accumulated current data by minutes
- High measuring accuracy with a sampling frequency of up to 3.3 kHz
- Self-powered, free from batteries or external wires
- Utilize a sampling rate of up to 1s for real-time monitoring and quick alarm response
- Compact size allows for installation in narrow scenarios
- Non-invasive clamp design ensures easy and safe installation without the need for power de-energizing
- Equipped with LED indicator to indicate working status and alarms
- Compliant with standard LoRaWAN® gateways and network servers
- Compliant with Milesight IoT Cloud

◆ Specifications

Model	CT101	CT103
Electrical Measurement		
Detection Parameter	RMS Current	
Sampling Frequency	3.3 kHz	
Working Voltage	Typical 100~480VAC, 50~60 Hz	
Maximum Input Current	100 A _{rms}	300 A _{rms}
Minimum Input Current	1 A _{rms}	2 A _{rms}
Accuracy	±1 %	
Resolution	1 mA	
Wireless Transmission		
Protocol	LoRaWAN®	
Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: SMA Female)	
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4	
Tx Power	16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz)	
Sensitivity	-137dBm	
Mode	OTAA/ABP Class A	
Others		
Button	1 × Reboot Button	
LED Indicator	1 × Status/Alarm Indicator	
Configuration	USB Type-C or Downlink	
Physical Characteristics		
Power Supply	Induced current power supply	
Insulation Voltage	2.5kV _{ac} (r.m.s)(1mA/1min)	
Color/ Material	Black, Nylon PA66 (UL94 V2)	
Operating Temperature	-20°C~70°C (-4°F~158°F)	
Storage Temperature	-25°C~80°C (-13°F~176°F)	
Relative Humidity	≤ 95% (Non-condensing)	
Ingress Protection	IP30	
Dimensions	86.5 × 31 × 37.4 mm (5.7 × 3.54 × 1.47 in) Wire Hole: Φ 16 mm (Φ 0.63 in)	
Weight	85.65g	
Installation	Suspended on the Testing Conductor	

◆ Dimensions

