

CSPV-ITP Current Transducer

CSPV-ITP-200 is a precise, wide-band and bipolar current transducer based on fluxgate principle. It is mainly for the DC, AC and pulse current measurement fields requiring ultra-high accuracy. The primary and secondary current are isolated from each other and the safety performance is superior.

Features:

- Ultra-high Stability & Accuracy
- Primary & Secondary Side Isolation Measurement
- Low Temperature Drift
- Saturation Detection & Self-recovery Function
- Strong Anti-interference Capability
- Wide Band & Low Response Time

Application:

- Medical Device
- Special Power Supply
- Magnetic Resonance Imaging (MRI) Unit
- Smart Power Grid
- Test Instrument
- New Energy

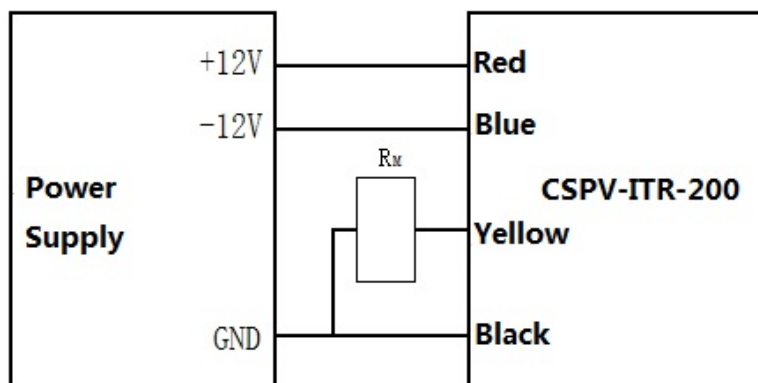


Dynamic Characteristics:

Accuracy X_G @ $T=25^\circ\text{C}$	≤ 0.05	%
Zero Offset Current I_o @ $-40^\circ\text{C}--85^\circ\text{C}$	≤ 10	μA
Output Offset Current I_{outT} @ $-40^\circ\text{C}--85^\circ\text{C}$	≤ 10	PPM
Linearity ϵ_L	≤ 0.02	%
Dynamic Response Time t_r $di/dt=100\text{A}/\mu\text{s}$, up to 90% I_{PN}	< 1	μs
Frequency Bandwidth (-3dB)	0~100	kHz

Electrical Characteristics:

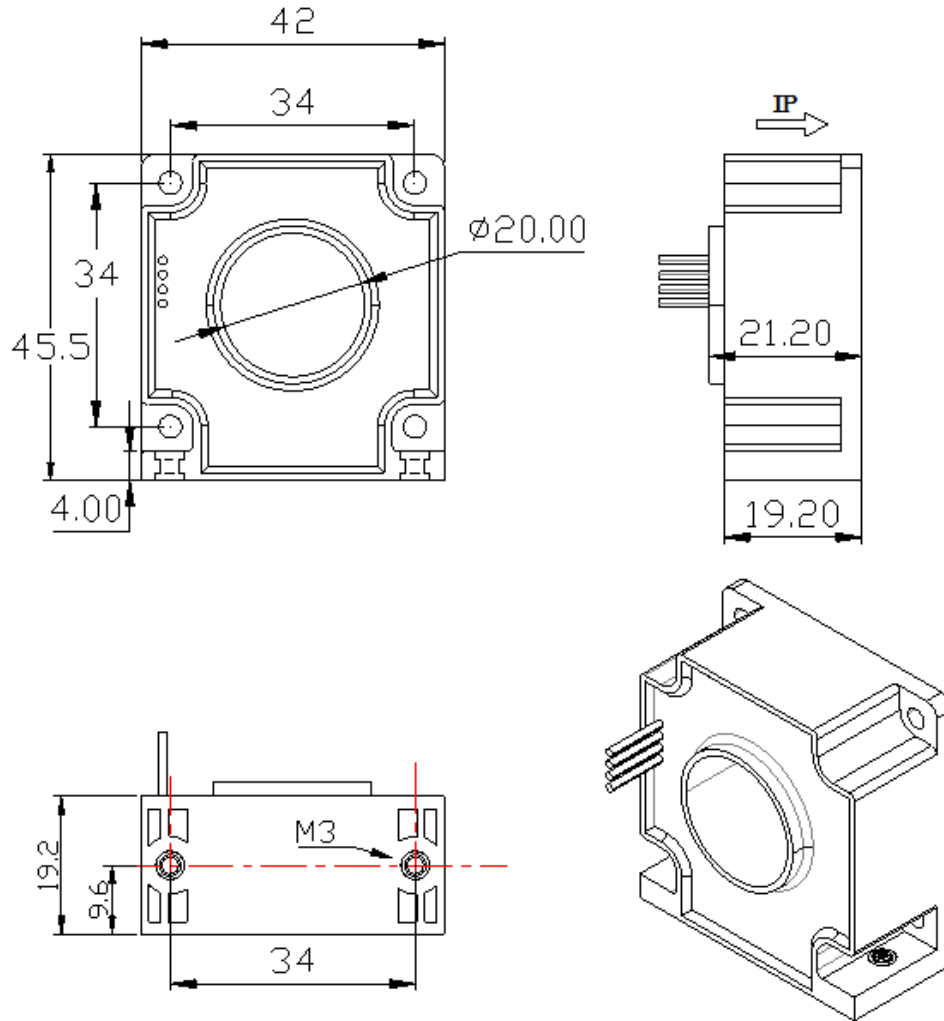
TYPE	CSPV-ITP-200
Primary Rated Current I_{PN} (A _{dc})	± 200 (Nominal) ± 240 (Max)
Primary Overload Current I_{PM} (A _{dc})	190A @ $R_M=23\Omega$ 240A @ $R_M=10\Omega$
Operating Voltage V_C (V)	± 12 (Nominal) ± 15 (Max)
Power Consumption Current I_{PWR} (mA)	± 225
Ratio K_N	1:1000
Rated Output Current I_{SN} (mA)	± 200
Dielectric Strength V_d (PRI-SEC)	50Hz, 1min, 5kV
Operating Temperature	-40°C~85°C
Storage Temperature	-55°C~95°C
Comparative Tracking Index	275V According to IEC-60112
Current Consumption	15 mA
Weight	58 ± 5g

Wiring Diagram:


$$I_P = K_N * I_S = K_N * (U_R / R_M)$$

The primary conductor temperature should not exceed 100°C.

Dimensions (mm) ±0.8mm



Yellow	Blue	Red	Black
lout	-12V	+12V	GND

Attentions:

1. Prevent ESD impact during wiring, which requires professional engineers to operate. The power supply, input and output connecting wires must not be misaligned or reversed, otherwise the product may be damaged.
2. The product shall be installed and used in an environment free from conductive dust and corrosivity
3. Severe vibration or high temperature may also cause product damage. Please pay attention to the use occasion.
4. Please pay attention to the danger of electric shock. After installation, the operator shall not touch any exposed conductive parts. If necessary, the sensor can be protected, such as adding a protective cover.