# **Product Specifications** PROVEN DATA LOGGING SOLUTIONS

# AC Current Transducer AT-CT253

## 250A AC

### **GENERAL DESCRIPTION**

The AT-CT253 probe is the latest in compact AC Current probes. Designed to meet the most stringent demands in industry and electrical contracting, while also meeting the latest safety and performance standards.

### **ELECTRICAL SPECIFICATIONS**

Operating Range: Measurement Ran Transformation Ra Output Signal:	tio: DC Voltage output	5 to 240A	
Range	Accuracy	Phase Shift	
5 to 10A	3% of Reading ± 100mV	N/A	
10 to 40A	2.5% of Reading ± 50mV	N/A	
40 to 100A	2.0% of Reading ± 50mV	N/A	
100 to 240A	2.0% of Reading	N/A	

**Frequency Range:** Nominal Operating Conditions:

**Crest Factor:** Working Voltage: Common Mode Voltage: Influence of Adjacent Conductor: Influence of DC on AC signal: Influence of Conductor Position in Jaw: Influence of Frequency:

3 @ 200Arms with an error (due to CF) of 4% 600Vrms 30Vrms <15mA/A at 50Hz DC current <20A, <5% 0.5% of mV output @ 50/60Hz 40 Hz to 1 kHz: 5% of mV output 1 kHz to 10 kHz: 12% of mV output < 3% of mA output from 40Hz to 1kHz < 12% of mA output from 1kHz to 10kHz

Derating above 3kHz: 200 A x (1/0.333F), F in kHz

Influence of Load:

## **MECHANICAL SPECIFICATIONS**

Dimensions:	5.47 x 2.00 x 1.18" (139 x 51 x 30 mm)	
Weight:	180 g (6.5 oz)	
Jaw Opening:	0.83" (21mm)	
Maximum Conductor Size:	: Cable: 0.78" (20mm) Bus Bar: 0.78 x 0.19" (20 x 5mm)	
Case Protection:	IP 40 (IEC 529)	
Drop Test:	1.0 m (IEC 68-2-32)	
Mechanical Shock:	IEC 68-2-27	
Vibration:	IEC 68-2-6	
Polycarbonate Material:	Jaws: Polycarbonate with 10% fiberglass charge, Red UL 94 V0	
	Case: Polycarbonate 920A Gray	
<b>Opening Operations - Life:</b>	: > 50,000	
Output:	5 feet double insulated cable with non-insulated ferrules	
	Red ferrule is positive	

40Hz to 10kHz

200A permanently to 1kHz:

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature: Storage Temperature: Altitude:

14° to 131°F (-10° to +55°C) -40° to 158°F (-40° to +70°C) Non-operating: 0 to 12,000 m Operating: 0 to 2000 m

**Operating Relative Humidity:** Influence of Temperature: Influence of Humidity (10 to 90% RH):

10 to 35°C 85% RH (without roll-off above 35°C) ≤150 ppm/°K, or 0.15% of mV output per 10°K  $\leq$  0.2% of mV output per 10°K @ 18°C to 28°C

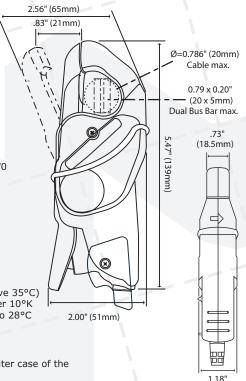


#### **Electrical:**

Double insulation or reinforced insulation between the primary or secondary and the outer case of the handle conforms to IEC 1010-2-32. 600V Cat. III, Pollution Degree 2

#### **Dielectric Strenath:**

4 5550V, 50/60 Hz between primary, secondary and the outer case of the handle



(30mm)