

AcuDC 200 Series DC meter



ISO9001 Certified



AcuDC 200 Series DC Power Meter



INTRODUCTION

AcuDC 200 series DC power meter can be used for monitoring and controlling in DC systems. These meters can measure a wide range of parameters such as voltage, current, power and energy. There are digital inputs for switch monitoring and relay outputs for remote controlling as well as an over-range alarming feature for voltage and current. Large signals, such as current and voltage can be converted to smaller signals using AO output. All data in the meter is accessible via RS485 using open Modbus RTU protocol.

APPLICATIONS

- Solar and wind energy systems
- Industry control systems
- DC Energy Management Systems
- Large UPS Systems

FEATURES

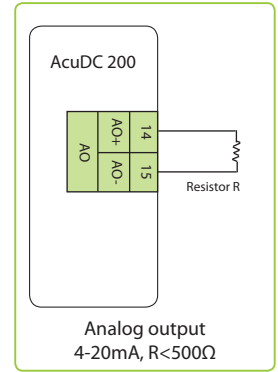
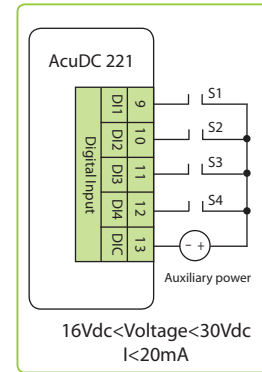
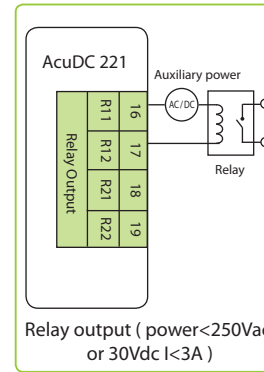
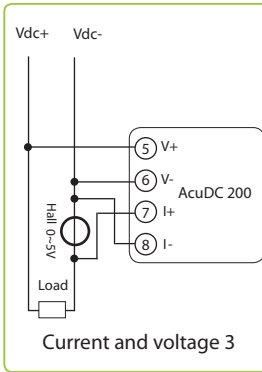
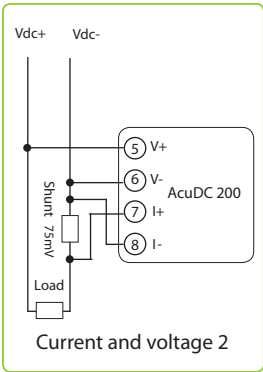
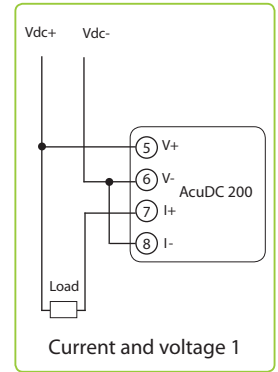
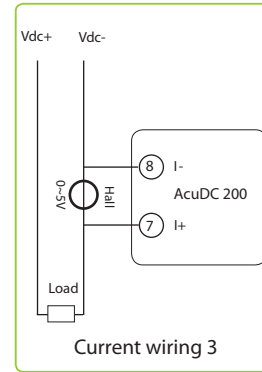
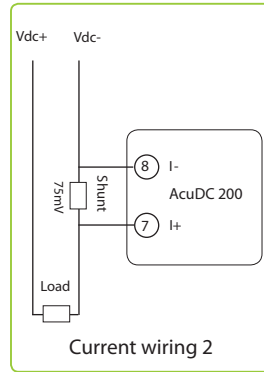
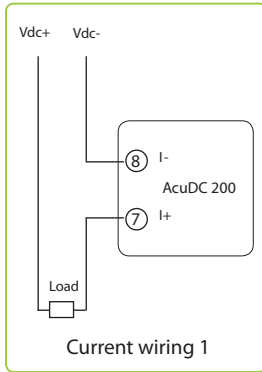
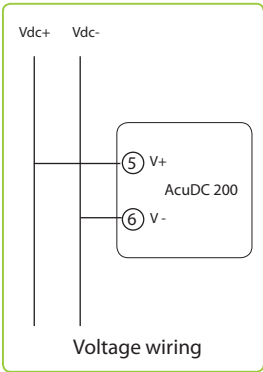
- DC power system metering
- Monitor and control power switches
- Alarming and analog output
- 96x48mm, can be installed on power panel
- Can be used in SCADA, PLC systems
- Large characters, vivid LCD; High light blue backlight
- Wide operation temperature range

SPECIFICATIONS

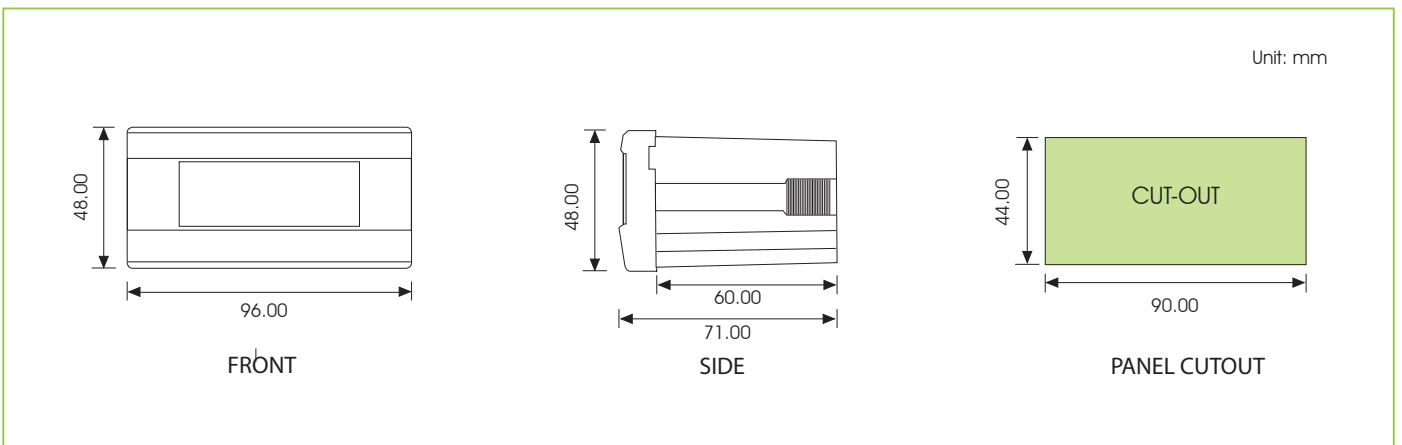
Function		AcuDC 211	AcuDC 212	AcuDC 213	AcuDC 221	AcuDC 222	AcuDC 223
Metering	Voltage V (Volt)	●		●	●		●
	Current I (Amp)		●	●		●	●
	Power P (W)			●			●
	Energy E (kWh)			●			●
IO	DI				⊙	⊙	⊙
	DO				⊙	⊙	⊙
AO	4~20mA				⊙	⊙	⊙
	0~5V	⊙	⊙	⊙	⊙	⊙	⊙
Alarming	Over range alarming				⊙	⊙	⊙
Communication	RS485, Modbus				●	●	●
Display	LCD	●	●	●	●	●	●
Dimensions	96x48x71mm						

Note: ● Function ⊙ Option Blank NA

TYPICAL WIRING



DIMENSIONS



TECHNICAL SPECIFICATIONS

Metering			
Parameters	Accuracy	Resolution	Range
Voltage	0.2%	0.01V	0~600V
Current	0.2%	0.005A	0.005~9999A
Power	0.5%	0.01W	0.01~6,000,000W
Energy	0.5%	0.1Kwh	0.1~99999.9kWh

Drift with Temperature: <100ppm/°C
Stability: 0.5%/year

Voltage	
Input range	0~600V
Input impedance	2MΩ
Load:	<0.2W
Accuracy	0.2%

Current	
Input range	0~10A (Direct input) 0~9999A (Extra current shunt or Hall element, with programmable range)
Shunt	50~100mV (programmable)
Hall element	0~5V, 0~4V, 0~20mA, 4~20mA
Power consumption	2W (max)
Accuracy	0.2%

Digital Input (DI)	
Optical isolation	2500Vac rms
Input Form	Contact with Power Supply
Input Resistance	2K ohm (typical)
Input Voltage Range	16~30Vdc
Close Voltage	>16Vdc
Max Input Current	20mA

Relay output (RO)	
Output Form	Mechanical Contact, Form A
Max Load Voltage	250Vac/30Vdc
Max Load Current	3A
On Resistance	100MΩ (Max)
Isolate Voltage	4000Vac
Mechanical endurance	5×10 ⁶ cycles

Analog Output (AO)	
Output Range	4~20mA or 0~5V
Resolution	12bit
Output Capability	4~20mA Max Resistance: 500 ohm 0~5V Max Current: 20 mA

Communication	
Type	RS485, Half Duplex, Optical Isolated
Protocol	Modbus RTU
Baud Rate	1200~19200bps
Isolate Voltage	2500Vac

Operating Environment	
Operation temp	-25°C~+70°C
Storage temp	-40°C~+85°C
Humidity	5%~95% Non-condensing
Altitude	2000m

Dimensions	
Dimensions	96×48×71mm
Weight	0.4kg

Power Supply	
Input	(P1) 100~240Vac, 50/60Hz 100~300Vdc (P2) 20~60Vdc
Power Consumption	2W

ORDERING INFORMATION

