



STANDARD DATA ACQUISITION SYSTEM

WDAS-S4

FEATURES

- Revenue-grade energy metering
- Battery backup for increased uptime and outage accounting
- Second-by-second monitoring and control for distributed generation
- Universal compatibility with Modbus/RTU and Modbus/TCP devices

SPECIFICATIONS

GENERAL

Dimensions	19.69 x 15.75 x 7.87 in (500.13 x 400.05 x 199.90 mm)
Weight	16 lb (7.26 kg) 32 lb with batteries (14.2 kg)
Ratings	UL 508A
Mounting	Non-penetrating surface-mount installation with included flange kit
Warranty ¹	5 years against defects in materials and workmanship

ENVIRONMENTAL

Operating Temperature	-20 to 70°C, 20-90% relative humidity non-condensing
Protection Ratings	NEMA 4X / IP67, outdoor-rated

POWER SUPPLY

Input Voltage	311-690Vac L-L
Input Protection	10A Class CC time-delay fuse
Power Consumption	Average: 11W Peak: 80W
UPS	(2) 9Ah sealed lead acid batteries in series (24V DC) Powers equipment for up to 18 hours after power failure ²
External ³	Up to 1A at 24V DC available for external devices and sensors Switched via UL 1077 supplementary protector

DATA ACQUISITION

Resolution	10 second nominal Configurable down to 1 second
Device Limit	250 devices over ethernet 32 devices over RS-485 <i>Contact sales@wattch.io for options to increase device count</i>
Compatibility	OPC UA, Modbus/RTU, and Modbus/TCP <i>Contact sales@wattch.io for an up-to-date hardware compatibility list</i>
Interfaces	(1) RS-485 (3) Available 10/100 Ethernet ports (switch included)
Storage Capacity ⁴	Up to 3 months of offline data storage capacity
Connectivity	LTE Cat 4 Modem with multi-carrier compatibility (requires Wattch data plan)

METERING

CT Inputs	Compatible with any 333 mV CT
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¹ Excludes SLA backup batteries and fuses

² Actual runtime will vary based on the number of external devices connected

³ Devices connected must be 21-28VDC tolerant for operation while running on UPS backup

⁴ Exact value varies with the number of configured devices

⁵ Applies from 1% to 120% of rated CT current, NIST traceable calibration certificate available upon request for an additional fee

Developed in partnership with **ACCUENERGY**



BILL OF MATERIALS

GENERAL

Enclosure	Polycase WQ-76
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POWER SUPPLY

Power Supply	Mean Well WDR-120-24
Uninterruptible Power Supply	Mean Well DUPS40
AC Protection	Holly HC10SR Fuse
I/O Supplementary Protector	Eaton FAZ-B1-1-SP
UPS Supplementary Protector	Eaton FAZ-B3-1-SP

DATA ACQUISITION

Production Meter	AccuEnergy Acuvim IIR-D-mV-P2V4-WEB2-D
Data Logger/Controller	Wattch Edge Controller

COMMUNICATIONS

LTE Modem	Digi International IX30-00G4
Ethernet Switch	TRENDnet TI-E50