



DG DATA ACQUISITION SYSTEM

WDAS-DG1

FEATURES

- Second-by-second monitoring and control for distributed generation assets
- Battery backup for increased uptime and outage accounting
- Fiber optic connectivity for long-distance expansion
- Universal compatibility with Modbus/RTU and Modbus/TCP devices
- PoE for connecting cameras
- Additional space/power distribution for installing devices in the field

SPECIFICATIONS

GENERAL

Dimensions	30 x 30 x 12 in (762 x 762 x 304.8 mm)
Weight	~140 lb without batteries
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 4 / IP14, outdoor-rated

POWER SUPPLY

Input Voltage	90-305Vac L-L
Input Protection	UL489 2-pole breaker
Power Consumption	Average: 50W Peak: 480W (charging batteries, PoE fully loaded, external devices fully loaded)
UPS	(2) 26Ah sealed lead acid batteries in series (24V DC) Powers equipment for up to 12 hours after power failure ²
External ³	Up to 3.2A 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 64 devices over RS-485 (2 isolated daisy chains) <i>Multiple units can be installed to increase device count</i>
Compatibility	OPC-UA, Modbus/RTU, and Modbus/TCP <i>Contact Wattch for an up-to-date hardware compatibility list</i>
Interfaces	(2) RS-485 (8) Available 10/100 Ethernet port (2) 100BASE-FX Fiber ports with SC connectors
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)

¹ Excludes SLA backup batteries

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

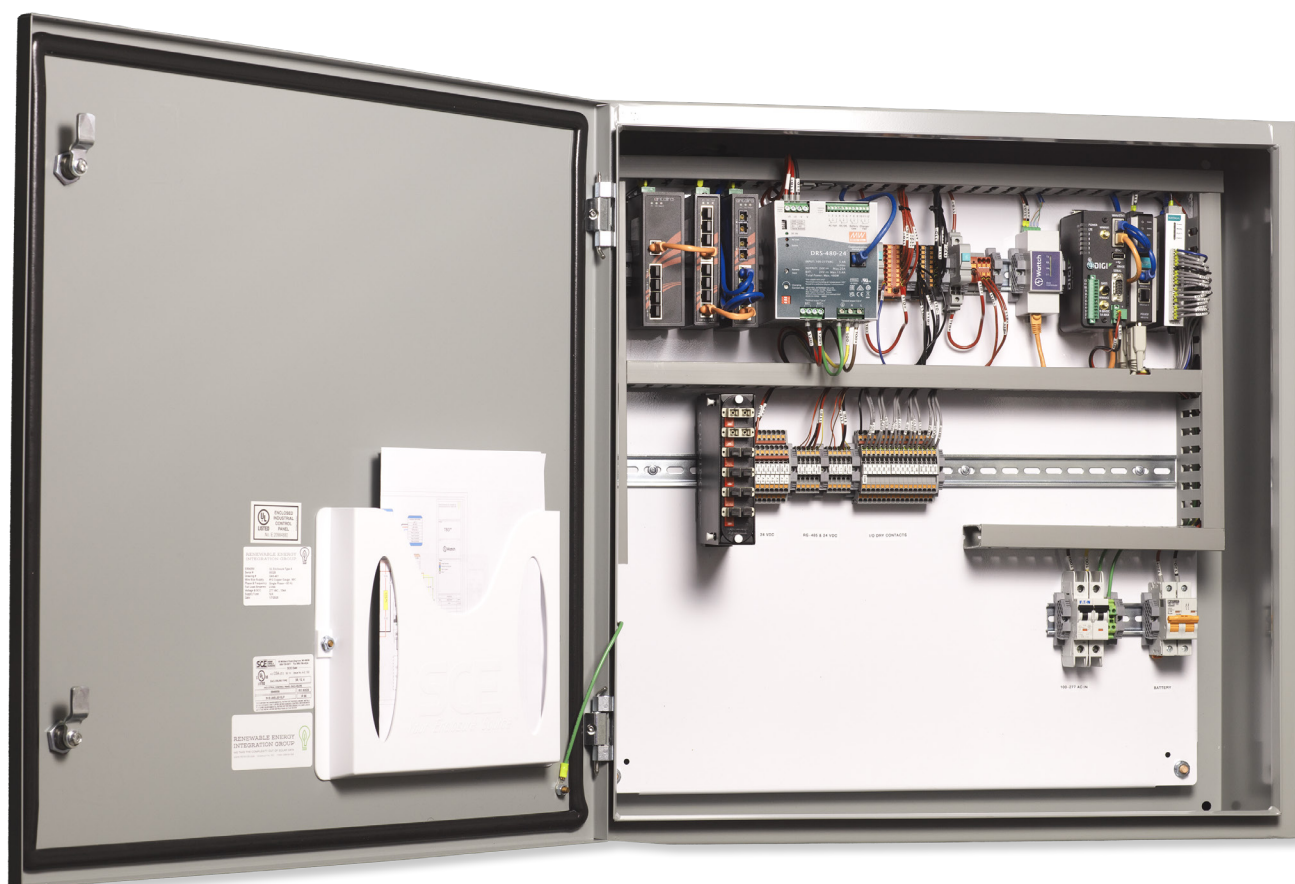
³ Devices connected must be 21-28VDC tolerant for operation while running on UPS backup

⁴ Exact value varies with the number of configured devices

Developed in partnership with

RENEWABLE ENERGY
INTEGRATION GROUP





BILL OF MATERIALS

GENERAL

Enclosure	SCE-30EL3012LPPL
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POWER SUPPLY

Power Supply/UPS	Mean Well DRS-480-24
AC Protection	Eaton FAZ-C5-2-NA
I/O Supplementary Protector	Phoenix Contact UT 6-TMC M 4A
Internal Bus Supplementary Protector	Phoenix Contact UT 6-TMC M 10A

DATA ACQUISITION

Data Logger/Controller	Wattch Edge Controller
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COMMUNICATIONS

LTE Modem	Digi International IX30-00G4
Fiber Switch	Antaira LNX-0602-M-T
Ethernet Switch	Antaira LNX-800A-T
PoE Switch	Antaira LNP-0500-24-T
Digital Inputs	Moxa ioLogik E1210-T
Modbus RTU to TCP Converter	Moxa MGate MB3270I-T