



READY|EDGE

Off-grid & Hybrid Solar System Monitoring & Management

- **System Visibility & Accessibility**
locally and in the cloud
- **Measure, Detect, Take Action**
digital & analog inputs with alerts
- **Battery Meter**
and battery health metrics
- **Manage a Generator**
and other charging sources

ReadyEdge™ comes as a single-point device for system-wide measurement, detection, and data collection, with purpose-built software catering to off-grid solar and hybrid system needs. All essential functionalities including cloud connectivity and industrial protocols support (SNMP, Modbus) are built into the core device, which can be paired with up to sixteen (16) compatible Morningstar charge controllers or inverters. ReadyEdge collects and aggregates key system information using LiveView 2.0, the state-of-the-art in UI/UX design, and summarizes data into a dashboard which can be logged for future access. It can manage generators and other charging sources like fuel cells and AC chargers that are critical to hybrid off-grid performance.

Battery health metrics are essential information for off-grid systems. ReadyEdge supports all storage chemistries and can even communicate with select battery BMS to provide detailed real-time health stats and performance history. It can operate completely as a stand-alone device, with no controller or inverter pairing required.

KEY FEATURES AND BENEFITS

- Use as a stand-alone device or connect up to sixteen (16) Morningstar products
- Suitable for 12, 24, 36, and 48V battery systems
- Includes access to Morningstar Solar Connect remote cloud service for visibility into your remote energy system anywhere in the world
- Automatic Generator Start (AGS) with 2-wire signaling and AC, DC, or Dry Contact feedback with retries
- Monitor temperatures, voltages, theft loops, door switches, smoke/water detectors, tank levels (water, fuel), and more
- Expand hardware and software capabilities with up to six (6) ReadyBlocks - use the blocks in any combination
- 12 Volt, 12 Watt output for powering EIA-485 bus, driving a relay, or other small 12 Volt loads
- Compatible with negative-ground, positive-ground, and ungrounded systems

- Pair the ReadyEdge with a ReadyShunt to capture precise battery State of Charge and other metrics
- AC Detect feature signals when AC power is present or lost - supports up to 240 Vac input
- LiveView 2.0 Web App interface provides full system visibility, configuration, and control. Manage the ReadyEdge, connected Products, inputs, outputs, and generator/charging sources from any web browser on a shared network
- All communication ports are isolated, preventing damage due to ground loops or connections to equipment on different power sources or grounds
- Mounts to 35mm DIN rail; includes two lengths of DIN rail to mount the ReadyEdge alone or with room for up to six (6) ReadyBlocks attached
- An Event Logger records timestamped alarms, faults, alerts, and other events to provide insights into system operation and to aid in troubleshooting

CAPABILITIES AT A GLANCE

MANAGE



Up to (16) Morningstar Products



Generator, Fuel Cell & Other Charge Sources



LIVEVIEW
Web App

Intuitive Interfaces
Locally & In the Cloud

CONNECT



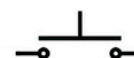
Simple Network Management Protocol
SNMP
ENABLED

Integrate With Standard
Industrial Protocols

EXPAND



READY|BLOCK



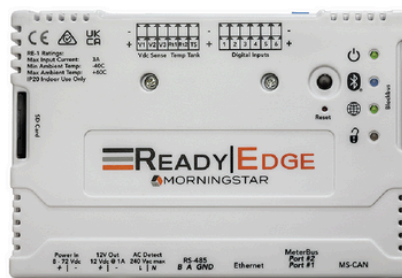
Load Control &
Dry Contact Signaling



Battery Meter &
Precision Current



BMS Interface &
Battery Health Data



MEASURE & DETECT



Starting Battery,
Midpoint Voltage



Breaker
Position



Tank Level



Temperature



Door Sensor



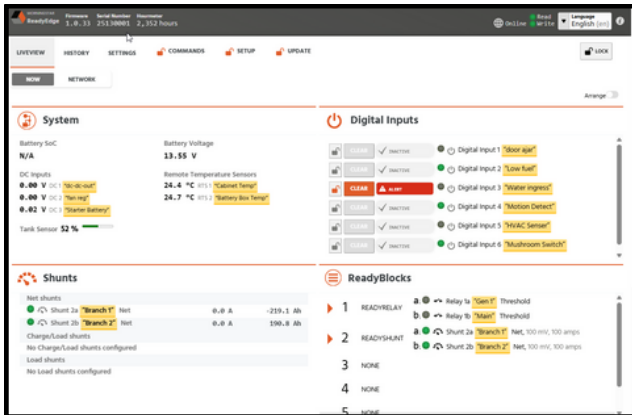
AC/Grid
Outage



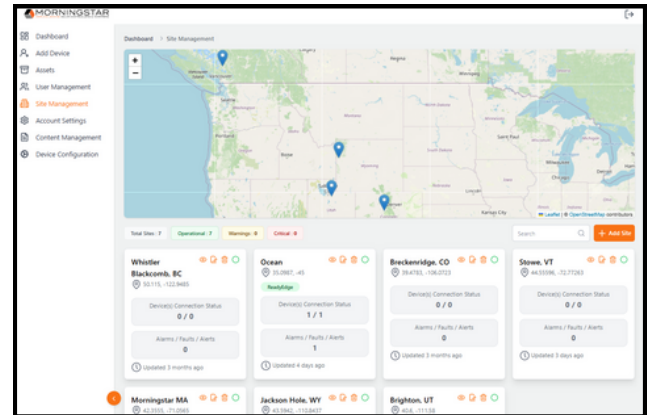
ANTI-THEFT
LOOP

INTUITIVE USER INTERFACES LOCALLY AND IN THE CLOUD

LIVEVIEW™ 2.0 WEB APP



MORNINGSTAR SOLAR CONNECT™



Local Access: *LiveView 2.0* provides a system dashboard, full configuration options, system management, and historic data using any web browser on a local or private network.

Remote Cloud Access: View status and historic information for up to (50) systems from a single dashboard in the cloud using *Morningstar Solar Connect* remote monitoring service (included).

EXPAND CAPABILITIES WITH READYBLOCKS AND THE READYRAIL SYSTEM

With ReadyEdge, Morningstar has engineered something significant out of solar electric systems: their obsolescence. ReadyEdge makes it possible to add features and new functionality precisely when and how it's needed. Out of the box, ReadyEdge covers the essential bases for connectivity, management, measurement, and monitoring, and its functionality can easily be expanded at any time in the future through Morningstar's snap-in ReadyBlocks.

Each block slides onto standard DIN rail and mates directly with ReadyEdge, eliminating the need for additional power or communication cabling. ReadyBlocks are automatically detected when connected and the new functionality is immediately available for configuration using the same ReadyEdge user interfaces.

For designers of systems for critical applications, this means there's no risk of making the wrong purchase for system integration and control. ReadyEdge is an industrial-oriented solution that provides the flexibility to select and plan options meeting system requirements up front or down the road.

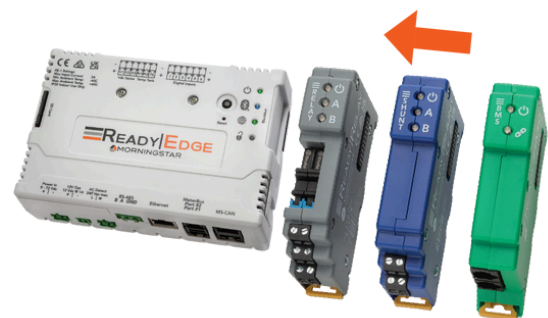
READY|RELAY
Load Control & Dry Contact Signaling



READY|SHUNT
Battery Meter & Precision Current



READY|BMS
Battery BMS Interface* & Battery Health Data



Blocks can be easily added to the ReadyRail standard DIN-mount and stacked to complete the system

* Morningstar's Energy Storage Partner Program (ESP) identifies battery suppliers that have been qualified and tested to work with our equipment



Specifications

Power	DC Input Supply Voltage Range Self-consumption (typical) Self-consumption (maximum)	8 - 72 Vdc < 2 Watts 14 Watts (w/ 12 V output @ max. output power)
Input/Output	(1) Programmable 12 W DC Output (6) Programmable Digital Inputs (1) Tank Level Sensor Input (resistive)	12 Vdc / 1 Amp maximum Dry contact inputs Supports both SAE & Euro standards: <ul style="list-style-type: none"> • SAE: 33 to 240 ohm • EU: 0 to 180 ohm
	(1) AC Voltage Input Detection (3) DC Voltage Inputs (2) Temperature Sensor Inputs	40 - 240 Vac nominal, Valid/Invalid 0 - 80 Vdc Input Range Morningstar Remote Temp. Sensors
Compatible Products		SunSaver-MPPT ProStar, ProStar-MPPT Tristar, Tristar-MPPT SureSine Classic
Data & Communications	(1) Ethernet Port (1) EIA-485 (2) Morningstar MeterBus Ports (2) Morningstar MS-CAN Ports	RJ-45, 10/100BASE-TX 3-wire A,B,GND. 1500 V isolation RJ-11, 1500 V isolation RJ-45 CANbus, 1500 V isolation, includes bus termination plug
	(1) Morningstar ReadyRail Port SD Card Slot Communication Protocols	Up to (6) ReadyBlocks Supported Up to 32 GB << other specs>> HTTP for Local LiveView Web App SNMP v1, v2c, v3 MODBUS TCP/IP MODBUS Serial
Environmental	Operating Temperature Range Storage Temperature Range Humidity Maximum Altitude	-40°C to +60°C -55°C to +80°C 100% non-condensing 3000 meters
Certifications		UL 62109-1 / CSA 22.2 107-1 IEC 62109-1 IEC 62368-1 EMC Directive 2014/30/EU Radio Equipment Directive (RED) 2014/53/EU FCC Part 15 Subpart B, Class B ICES-003 Issue 7, Class B CEC Australia Listing ACMA AS/NZS CISPR 32:2015
Warranty	5 years	Contact Morningstar or your authorized distributor for complete terms