

## Intelligent Load Control

With Synergize® RF



Balancing electrical load on the distribution network is essential to provide a reliable and efficient supply of energy to homes and businesses. From aging infrastructure to distributed energy resources, a broad range of variables are challenging utilities to evaluate solutions that will keep distribution systems working at optimum efficiency to prevent brownouts, blackouts and premature equipment failures while providing reliable power to customers.

Two of the most persistent challenges utilities face to provide reliable power are to manage localized capacity constraints and handle over-stressed distribution equipment. To maintain reliability while controlling electric load balance, utilities need detailed information about consumption. To better understand customer loads, they must rely on data and analytics.

### OVERVIEW

Aclara's Intelligent Load Control technology solves these challenges by enabling utilities to implement load management programs as secure dispatchable resources for improved grid quality.

The Intelligent Load Control devices can be deployed to alleviate specific locational constraints by managing consumer loads. Installed on premises, Aclara's Intelligent Load Control Technology continually monitors loads locally by building load-shed profiles using distributed intelligence, thus allowing utilities to better manage customer loads.

The distributed intelligence is centrally managed by operators using the Aclara iiDEAS® headend software, allowing operators to set business rules, define strategies, and orchestrate load control events. Standards-based interfaces are also available to receive event objectives from balancing authorities.

Simply put, Aclara's Intelligent Load Controller offers the most advanced technology, and communications to manage load programs and extend the life of capital investments.

### FEATURES AND BENEFITS

Unlike other control technologies, Aclara's Intelligent Load Control offers:

- **Improved reliability during emergencies** by transmitting "SCRAM" broadcast messages. Each message provides confirmed load shed to all selected devices in under 10 seconds, quickly reducing load to keep the lights on.
- **Improved long-term reliability** by smoothing transitions to reduce system stresses with ramped load shed and cold load pickup.
- **Reduced wholesale penalties and demand charges**, which enables surgical peak reduction and peak shifting strategies.
- **Increase customer satisfaction** satisfaction with intelligent load control that learns the customer's load profile and applies load reduction to minimize customer impact while maximizing the load shed.
- **Low maintenance cost** – no need to maintain a second network when utilizing Aclara's Synergize® RF network for both AMI and load control.
- **Improved forecasting** – current sensors monitor availability for dispatch.
- **Accurate measurement and verification** – load shed is measured and verified by current sensors in the Aclara intelligent Load Control along with the AMI meter.
- **Security** – NIST compliant multi-level security; licensed 450MHz communications.

# Intelligent Load Control

## With Synergize® RF



### PRODUCT SPECIFICATIONS

<b>Model</b>	Aclara Intelligent Load Control Switch
<b>Size</b>	9"H x 8.2"W x 3.25"D
<b>Enclosure</b>	NEMA 4, tamper seal
<b>Operating Power</b>	208 - 277 VAC +/-15%
<b>Operating Frequency</b>	60Hz +/- 3.0Hz
<b>Quiescent Power</b>	1W +/- 0.5W
<b>Operating Temperature</b>	-30 °C to +55 °C
<b>Operating Humidity</b>	0% to 95% + /- 4%, non-condensing
<b>Relays Options @ 240 V</b>	5A/5A, 5A/30A, 30A/30A
<b>Current Sense Range</b>	
5A Relay	70mA - 5A
30A Relay	350mA - 30A
<b>Autonomous Control</b>	Configurable under voltage and under frequency
<b>Communications</b>	Aclara Synergize RF, licensed 450 MHz Point-to-multipoint
<b>Standards</b>	UL-746C, UL-916

Aclara Technologies LLC is a world-class supplier of smart infrastructure solutions (SIS) to more than 780 water, gas, and electric utilities globally. Aclara SIS offerings include smart meters and other field devices, advanced metering infrastructure and software and services that enable utilities to predict and respond to conditions, leverage their distribution networks effectively and engage with their customers. Aclara Technologies LLC is owned by an affiliate of Sun Capital Partners. [Visit us at Aclara.com](http://Aclara.com), phone 800 297 2728 or contact us at [info@aclara.com](mailto:info@aclara.com) and follow us on Twitter @AclaraSolutions.