

# Aclara kV2c<sup>™</sup> Electric Smart Meter

Commercial and Industrial

Aclara's fifth generation kV2c<sup>TM</sup> meter is designed for revenue class metering in commercial and industrial applications. This new generation of meter moves beyond revenue metering to real time instrumentation, true power quality monitoring and real cost of service measurements. Whether you are metering the simplest energy rate or collecting critical quality of service and load analysis information on a polyphase or a singlephase circuit, there is a kV2c meter configuration to meet your needs.

#### **ELECTRICITY METER FOR ALL YOUR FUTURE NEEDS**

The Aclara kV2c meter family is one of the most widely accepted ANSI® commercial and industrial meters with over 2 million units deployed in the field since its introduction. The robust revenue-grade meter design is based on Aclara's cutting edge technology that provides high accuracy and reliability. This fifth generation kV2c has eight times the processing power and three times the memory of previous models. This allows for future upgrades and new applications without having to replace the meter.

#### KEY BENEFITS

- · Reliable and accurate cash register for utilities
- Revenue assurance using diagnostic and event tools
- Low maintenance and high accuracy over the life of the meter
- Strong overvoltage capabilities Twice the operating voltage to absorb the system events of the grid
- · Adaptive and versatile meter with bidirectional and four quadrant measurements
- Smart metering functions such as Time of Use, demand metering and reactive measurement
- · Advanced power quality monitoring
- Robust meter security and standards compliance
- Polyphase Remote Disconnect is available for unique utility applications

### **RELIABILITY**

- Over 130 years of experience designing and building electricity meters
- · Robust revenue-grade watt-hour and demand meter with advanced recording options
- Based on Aclara's high-quality technology, providing 0.2% accuracy and reliability
- · Highly Accelerated Life Testing assures the reliability of the meter over the life of the meter
- Provide utilities with tools to lower operational cost and provide accurate metering solutions

#### **SMART CONFIGURATION**

- Customize advanced metering options to suit customer needs and complex rate requirements.
- Versatile programming softswitches allowing the selection of advanced functionality such as expanded recording features, harmonic analysis, time of use, load profile, and power quality measures.
- Options available to provide totalization capability and pulse outputs.
- Tamper detection tools and installation verification capabilities to automatically catch errors, wiring changes, tampering, and billing issues.

## SOLUTIONS FOR THE MOST DEMANDING APPLICATIONS

Aclara's most advanced electricity metering product, the kV2c, delivers world class capability for revenue metering and protection, power quality and cost of service measurements..



#### **RELIABLE METERING**

In this dynamic time of regulatory scrutiny and customer engagement, you can rest assured by the product and the company behind the product. We have ANSI and ISO certified labs to ensure that our product design and manufacturing processes yield a robust and reliable product.

Our testing procedures go well beyond the ANSI and IEC requirements for which we design to, including some of the most aggressive internal standards. We include world-class Radio Frequency (RF) communications expertise to ensure that our meter products are hardened to withstand even the harshest of RF environments without sacrificing the quality or integrity of the metrology or the communications technology

#### **ACCURATE & DEPENDABLE**

With an accuracy class of 0.2%, the Aclara kV2c meter provides outstanding capabilities for accuracy. With Aclara's Highly Accelerated Life Testing we are replicating the normal wear and tear that would normally be experienced over the usable lifetime of the product in a shorter amount of time.

## **INTEGRITY OF SUPPLY**

Having a partner that can provide assurance in supply is critical when a utility begins a mass deployment of meters. Aclara's process focus and rigor around supply chain excellence minimizes the risk to the utility, giving them confidence to manage installation crews and provide accurate scheduling to customers. Aclara dual sources all components and in many instances from different countries. This reduces our risk of parts obsolescence impacting our meters as well it helps us in the case of a catastrophic event.



#### **TECHNICAL SPECIFICATIONS**

Available Forms CL20: 3S, 4S, 9S, 36S, 45S

> CL100: 16S (With Remote Disconnect only)

CL200: 1S, 2S, 12S, 16S, 25S

CL320: 2S, 12S, 16S

Accuracy Exceeds +/- 0.2% Certified Class Accuracy

Typical Watt Loss: 0.8W @ 120V / 1.7W @ 480V

Voltage 120 to 480 Volts Auto-ranging Class 20, 100, 200, and 320 Current

Frequency 50 or 60 Hz Temperature -40°C to 85°C

Relative Humidity <95%

Weight 2.5 to 3.9 lbs.

6 1/2" Wide by 8 1/4" Deep Dimensions Display Supports 6 Characters

Up to 75 displayed items

Modes: Normal, Alternate, Test and Site Genie (Diagnostics) 3

Character Display Label Phase Voltage Indicators

Simple I/O – 2 form C outputs, 1 form A output & 1 RTP Multiple **KYZ Option Boards** 

I/O - 2 form C outputs, 6 form A outputs,

4 pulse inputs & 1 RTP

Standards ANSI C12.1, C12.10, C12.16, C12.18. C12.19, C12.20

FCC Class B emissions

UL2735\*

## METROLOGY AND DATA CAPACITY

- 5 Accumulators
- 10 Coincident Demands
- Demand (Block, Rolling or Thermal)
- · 20 Channels of Load Profile Data (1,5,15,30 or 60-minute intervals)
- 384kB of Load Profile Storage (Days recorded depends on number of channels, i.e. 5 channels of 15 minutes = 306 Days)
- Energy Data (Wh, VArh & VAh)
- Instrumentation Data (Voltage, Current, Temperature and Frequency)
- Time of Use (4 periods & 4 seasons, 3 daily rates plus holiday, 5 billing and demand measures per period)
- · Comprehensive Event Logging
- Remote Configuration and Firmware updates over the air

<sup>\*</sup>No UL2735 Certification for 16S CL100 with Remote Disconnect