# Data Stream RS485 Digital Voltage Transducer



Single Element - .26" Window 150 to 300 VAC Input Range



Two Element - .26" Window 150 to 300 VAC Input Range



Three Element - .26" Window 150 to 300 VAC Input Range

The **CRD4500** Series Data Stream Digital Transducers are designed for applications where AC current waveforms are not purely sinusoidal. The digital technology is used to measure voltage, current, power frequency and energy in single and three phase designs. The data is streamed over an RS485 IEEE bus which enables multiple transducers to communicate thru a single master connection. These advanced sensors are ideal for entire plant or zone monitoring. Also, the communication alagorithm can be pre-ordered with ASCII based control or modified MODBUS based control.

#### Sensing

True RMS Voltage, Each Phase

#### **Applications**

Sub-Metering

Motor Loads

Uninterruptible Power Systems

Remote Monitoring

Load Shedding

**Energy Management** 

#### **Features**

35mm DIN Rail or Panel Mount

Available with 0 - 5 VDC or 4 - 20 mA DC outputs

24 VDC powered

Use with external current transformers

Highest precision available

Connection diagram printed on case

### **Regulatory Agencies**



### **PART NUMBERS**

**CRD4510** - 1 Element AC Voltage RS485 Transducer **CRD4550** - 2 Element AC Voltage RS485 Transducer

CRD4570 - 🗆 - 3 Element AC Voltage RS485 Transducer

Add suffix for input range

**150 -** 0-150 VAC **300 -** 0-300 VAC other ranges available

Note: Add an M at the end for MODBUS



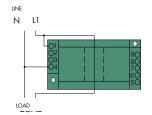
CR Magnetics, Inc. 3500 Scarlet Oak Blvd. St. Louis MO USA 63122 V: 636-343-8518 F: 636-343-5119

Web: http://www.crmagnetics.com

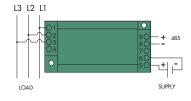
E-mail: sales@crmagnetics.com

#### **SPECIFICATIONS**

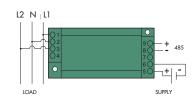
Basic Accuracy:0.5	5%	Output Load:20 mA DC - 0 to 300 $\Omega$
Calibration:Tru	ue RMS Sensing	0-5 VDC - 2K $\Omega$ or Greater
Thermal Drift:500	) PPM/°C	Response Time:250 ms. max. 0-90% FS
Operating Temperature:0°C	C to +60°C	Relative Humidity:80% for temperatures up to
Installation Category:CA	ΤII	31°C and decreasing linearly to 50% at 40°C
Pollution Degree:2		Output Resolution:16 bit
Insulation Voltage:250	00 VDC	Transducer fanout on common bus:64 max.
Altitude:200	0 meter max	Baud Rate 2:1200, 2400, 4800, 9600,19.7K .bps
Frequency Range:20 F	Hz - 5 KHz	A/D Conversion Type:4th order Delta Sigma
MTBF:Gre	ater than 100K hours	Device Address 2:00 to FF
Cleaning:Wat	ter-dampened cloth	Data Format:ASCII
Supply Voltage:24 \	VDC ±10%	Supply Current:Typical 30mA Max 30mA
Torque Specifications:3.0	inch lbs (0.4Nm)	Weight:



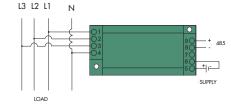
CRD4510 Single Element, 2-Wire



CRD4550 3 Element, 3-Wire

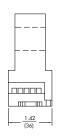


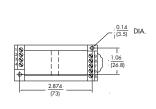
CRD4550 Single Element, 3-Wire

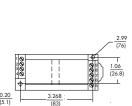


CRD4570 3 Element, 4-Wire

# **Connection Diagram**







#### 0.26 (6.5) Dia. 1 hole for single element 2 holes for two element 3 holes for three element

## **OUTLINE DRAWING**



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