



# NK Technologies



MADE IN  
USA

**APN & APO Series** Power Transducers feature the patented AutoPhase™ technology, which helps to correct common wiring errors ranging from CT reversal to phase mismatch.

Analog 4–20mA or 0–5/10VDC (proportional to kW) and pulse kWh outputs are available as standard options; RS232 outputs are optional in either configuration.

## APN & APO SERIES Power Monitors

### Applications

#### Cost Allocation

- Measure and display power, both demand (KW) and consumption (KWH).

#### Improve Plant Performance

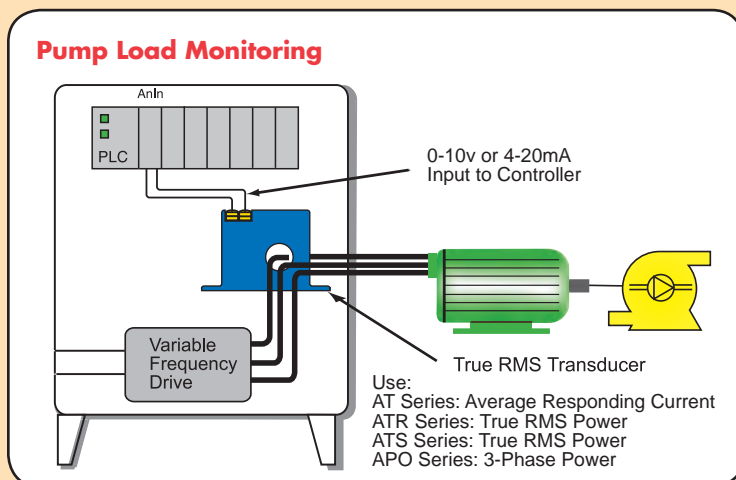
- Measure and correct low power factor.
- Measure and stop erratic machine operation and overheats; extending equipment life.

#### Machine Control

- KW monitoring provides a good picture of machine tool operation.

#### Generator Performance

- A cost-effective way to monitor power output from backup generators, ensuring "information age" standard.



### Features

#### Meter Grade Digital Accuracy

- Provides for reliable measurement.

#### Patented AutoPhase™ Technology

- Senses and automatically corrects for errors in CT orientation or mismatches between voltage inputs and CTs, identifying the reversed CTs and mismatched phases.

#### Compatible with a Wide Variety of CTs

- APO/APN Series KWH meters accept inputs from traditional existing 5A CTs or from ProteCT™ 0.333V output CTs which improve safety and eliminate the need for costly shorting blocks.

#### Available in Quick-mount NEMA-rated Enclosures

- Installation is simple and efficient.

#### Networked Options

- MODBUS option allows for direct network connection without the need for expensive system interfaces.

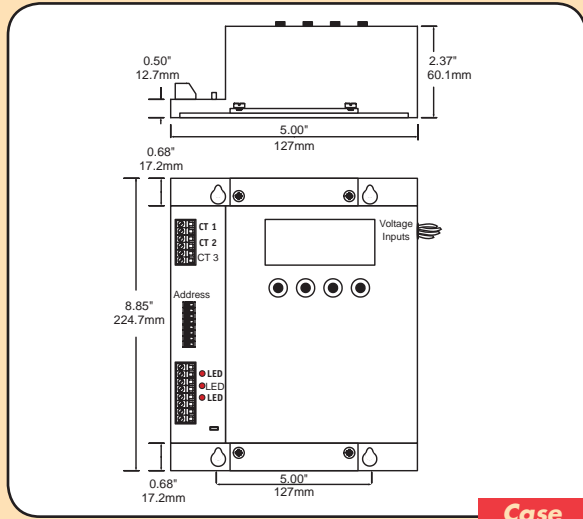
#### Agency Approved.

- UL and CUL listed.



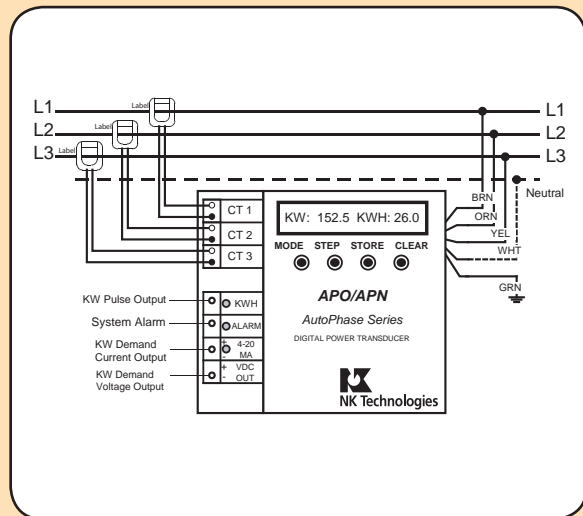
# NK Technologies

## Dimensions



Case

## Connections



## Specifications

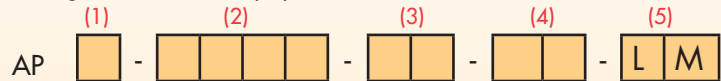
<b>Power Supply</b>	None—Self-powered
<b>Accuracy</b>	0.5% FS, True RMS Power +/- 0.5Hz
<b>Voltage Range</b>	120–600VAC, Auto Range Select, Up to 12KV with optional Potential Transformers
<b>Amperage Range</b>	<ul style="list-style-type: none"> <li>● 5–1500A with ProteCT™ CTs</li> <li>● 50–3000A with Current Output (5A) CTs</li> </ul>
<b>Isolation Voltage</b>	3700VAC
<b>Built-in Fuse Rating</b>	600VAC, 0.5A (no external fuses required)
<b>LCD Display</b>	Two line, 16 character
<b>Connections</b>	<ul style="list-style-type: none"> <li>● Voltage 12" leads, #18 AWG, pre-tinned</li> <li>● Current Input: Captive screw terminal for 14–22 AWG wire</li> <li>● Outputs: Captive screw terminal for 14–22 AWG wire* or 3-pin connector**</li> </ul>
<b>Digital Output</b>	RS232 ASCII Data String (optional)
<b>Analog Outputs*</b>	<ul style="list-style-type: none"> <li>● KW: Choice of two; 4–20mA and 0–5 or 0–10VDC</li> <li>● Alarm Contact: N.O. solid state contact, 0.1A @ 30VAC/VDC (from 75–95% under voltage)</li> <li>● KWH: Solid-state contact, 0.1A @ 30VAC/VDC; Range 0.01, 0.1, 1.0 or 10KWH per pulse</li> </ul>
<b>Listings</b>	UL Listed (Measuring and Testing Equipment)



## Ordering Information

Sample Model Number: APN-R32-5A-MX-LM

AC power transducer with RS232 output, module for mounting inside a panel or switchgear with an LCD display.



### (1) AP Type

O	Non-networkable Power Transducer
N	Networkable Power Transducer

### (4) Case Style

MX	Module (Aluminum)
MN	Module in NEMA 1 enclosure
M4	Module in NEMA 4 enclosure

### (2) Output Type

KWKH	KW (4–20mA & 0–10VDC) & KWH Pulse*
R232	RS232*

### (5) Display

LM	LCD on Module
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\*APN type only

### (3) CT Input

5A	5 Amp CTs (Ratio:5)
PC	ProtectCT low voltage output CTs