



NK Technologies

APN & APO Series



'APN & APO' Power Transducers from NK Technologies 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 in either standard Modbus or RS232 Configurations.

MADE IN USA

Power Transducer

Applications

Cost Allocation

Measures and displays power, both Demand (KW) and consumption (KWH).

Improve Plant Performance

- Measure and correct Low Power Quality factor.
- Stop erratic machine operation and overheats, extend equipment life.

Machine Control

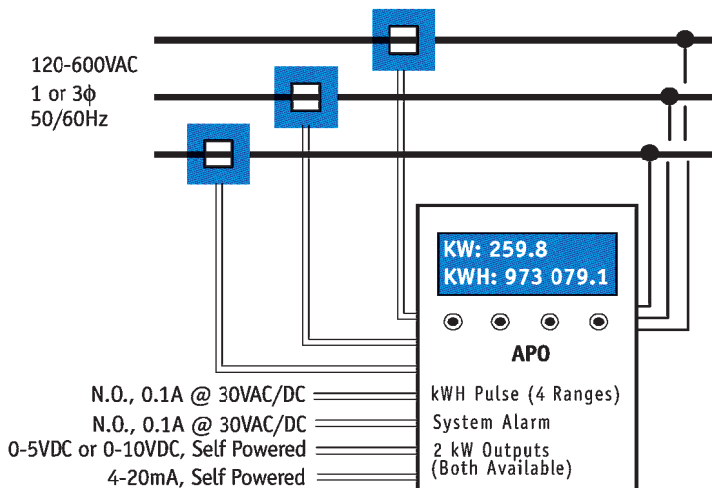
KW monitoring provides a good picture of machine tool operation.

Generator Performance

Provides a cost effective way to monitor power output from back up generators, ensuring "Information Age" standards.

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 shunting 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.



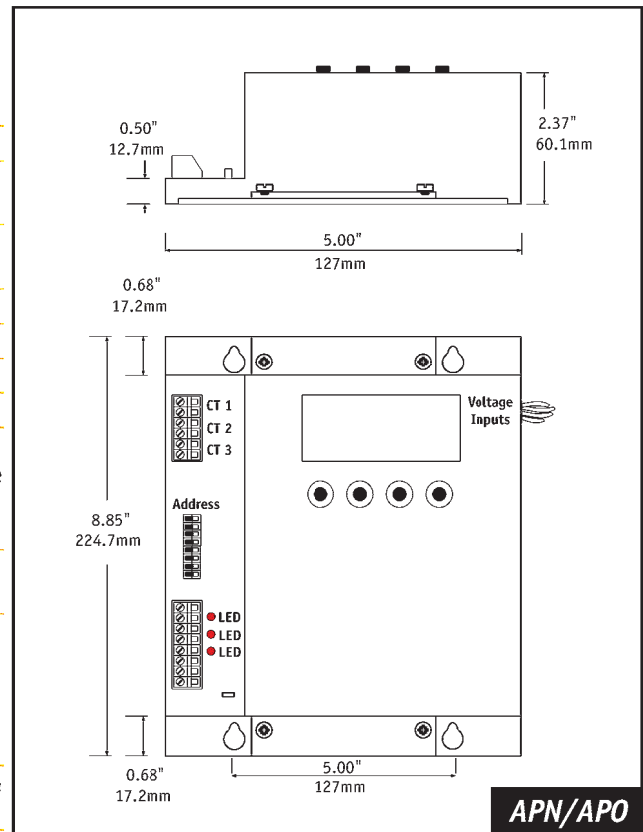
Power Transducer

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Know your power...
because with knowledge comes control.

Specifications

Power Supply	None — Self-powered
Accuracy	0.5% FS, True RMS Power +/- 0.5 Hz
Voltage Range	120-600VAC, Auto Range Select, Up to 12 KV with optional Potential Transformers
Amperage Range	<ul style="list-style-type: none"> ■ 5-1500A with ProteCT CTs ■ 50-4,000A with Current Output (5A) CTs
Isolation Voltage	3700VAC
Built In Fuse Rating	600VAC, 0.5A (No External fuses required)
Environmental	0 to 122°F (-18 to 50°C), 0-95% RH, non-condensing
LCD Display	Two line, 16 character
Connections	Voltage: 12" leads, # 18 AWG, pre-tinned Current Input: Captive Screw terminal for 14-22 AWG wire Outputs: Captive Screw terminal for 14-22 AWG wire* or 3-pin connector**
Modbus Set**	RTU Version, RS485 addressable, 9600 Baud; optional RS232
Analog Outputs*	<ul style="list-style-type: none"> ■ KW: Choice of two; 4-20mA and 0-5 or 0-10VDC ■ Alarm Contact: N.O. solid state contact, 0.1A @ 30VAC/VDC (from 75-95% undervoltage) ■ KWH: Solid state contact, 0.1A @ 30VAC/VDC; Range 0.01, 0.1, 1.0 or 10kWH per pulse
Listings	CE, UL 508 Industrial Control Equipment (Pending, USA & Canada)



APN/APO

Ordering Information

Example: APN-MOD-5A-MX-LM

AC Power Transducer with Modbus RTU output, module for mounting inside a panel or switchgear with an LCD display.

AP	—		—		—		—	
AP Type		Output		CT Input		Case Style		Display
O Non-networkable Power Transducer		KWKH KW (4-20mA & 0-10VDC) & KWH Pulse*		5A 5 Amp CTs (Ratio:5) PC ProtectCT low voltage output CTs		MX Module (Aluminum) MN Module in NEMA 1 encl. M4 Module in NEMA 4 encl.		LM LCD on Module LC LCD on enclosure (MN Case only) LR LCD shipped loose, remote mount by others.
N Networkable Power Transducer		MOD Modbus RTU** R23 RS232**						
		*APO Type only						
		**APN Type only						

Power Transducer

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