

Power Tools by



Transducers for
Measuring Virtually any
Electrical Variable
in Process and Utility Applications



Measurement Tech: Power transducer specialists.

Even a cursory glance through this brochure will reveal MTECH as a major supplier of power transducers and related products. That is what we are. That is what we have been, with legacy connections back to 1978. We are acknowledged specialists in the measurement of electrical variables. We make our transducers for a long list of customers, domestically and internationally, and for both the power and process industries.

We strive to meet the needs of the market with more models and more features per model. All are built to exacting standards and to perform with exceptional accuracy. The only thing more significant than the quantity of our line is its quality.

Also worth noting is the history and legacy of our products as well as the industry acumen of MTECH's ownership, management and staff.

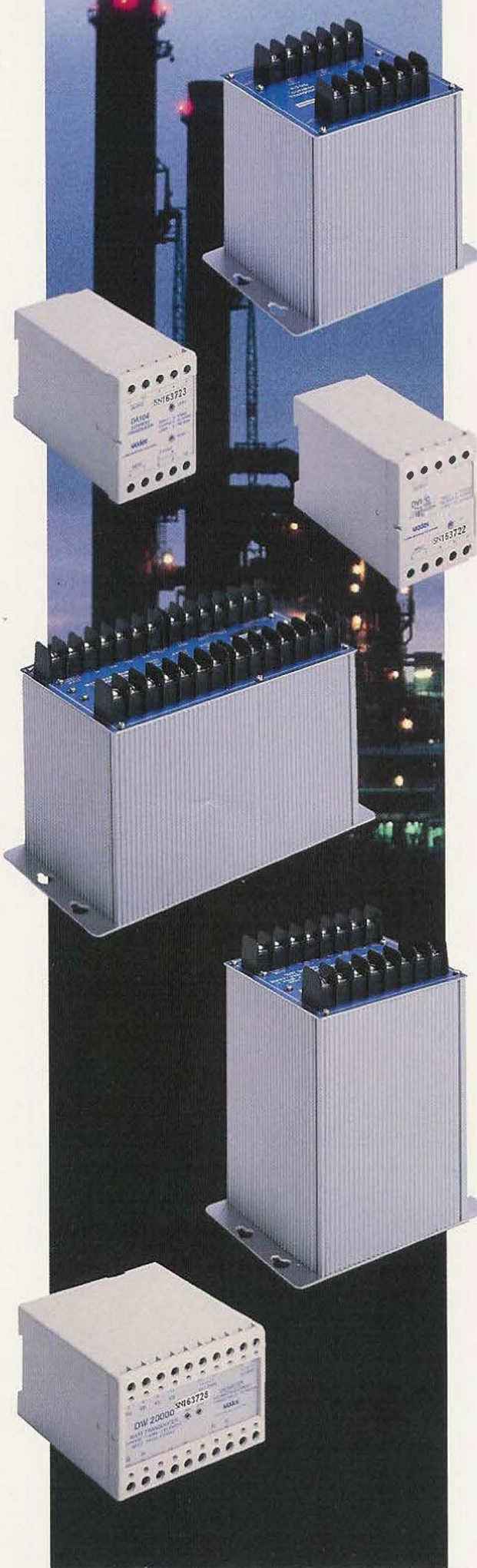
Additionally, we manufacture a broad range of process transmitters or signal conditioners and power supplies for process loop applications.

If you have a requirement for any of the MTECH transducers profiled here, or for any of our other products, we would very much like to provide you with more information, a demonstration, or a quotation.

Current and Voltage Transducers

Average-sensing models are available for economical measurement of current or voltage on systems where the waveform is a pure sine wave. MTECH offers true RMS devices for applications where harmonics are present in the system.

- 0.25% of full scale
- 0.01%/°C temperature coefficient
- 0.2%/year, long term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2 kV dielectric isolation
- Wide variety of input and output options
- Metal can or ABS DIN rail cases



AC Power Transducers

MTECH makes a wide range of these high accuracy electronic multiplying devices. All are available in 1, 1½, 2, 2½, and 3 element versions, either self-powered or powered from an external source.

- Watt, Var, Q, Combined Watt/Var, and Combined Watt/Q Models
- 0.2% of reading accuracy
- 0.005%/°C temperature coefficient
- 0.1%/year, long term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2 kV dielectric isolation
- Wide variety of input and output options
- Metal can or ABS DIN rail cases

AC Watt, Var, and Q-Hour Transducers

MTECH makes a wide range of these high accuracy electronic multiplying devices. All are available in 1, 1½, 2, 2½, and 3 element versions, either self-powered or powered from an external source. Mercury contacts are for driving mechanical counters; solid-state outputs are for electronic counters and controllers.

- Watt/Watthour, Var/Varhour, Q/Q-hour, Combined Watt/Watthour and Var/Varhour or Watt/Watthour and Q/Q-hour models
- 0.2% of reading accuracy
- 0.005%/°C temperature coefficient
- 0.1%/year, long term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2 kV dielectric isolation
- Wide variety of input and output options
- Metal can cases

DC Voltage Transducers, DC Current Transducers, and DC Voltage Transducers with Built-in

Ground Fault Detectors

These units provide an isolated analog output proportional to the DC voltage or current input. The DC voltage transducer is also available with ground fault detection that checks for grounding of either pole in a floating battery system.

- Low battery drain
- Sensitive ground leakage detection
- Input available from 5 mV to 1200 volts DC and 0.5 mA to 10 amps DC
- 0.2% of reading accuracy
- 0.005%/°C temperature coefficient
- 0.1%/year long-term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2.0 kV dielectric isolation
- Wide variety of input and output options
- Metal can cases or ABS DIN rail cases

Power Factor and Phase Angle Transducers

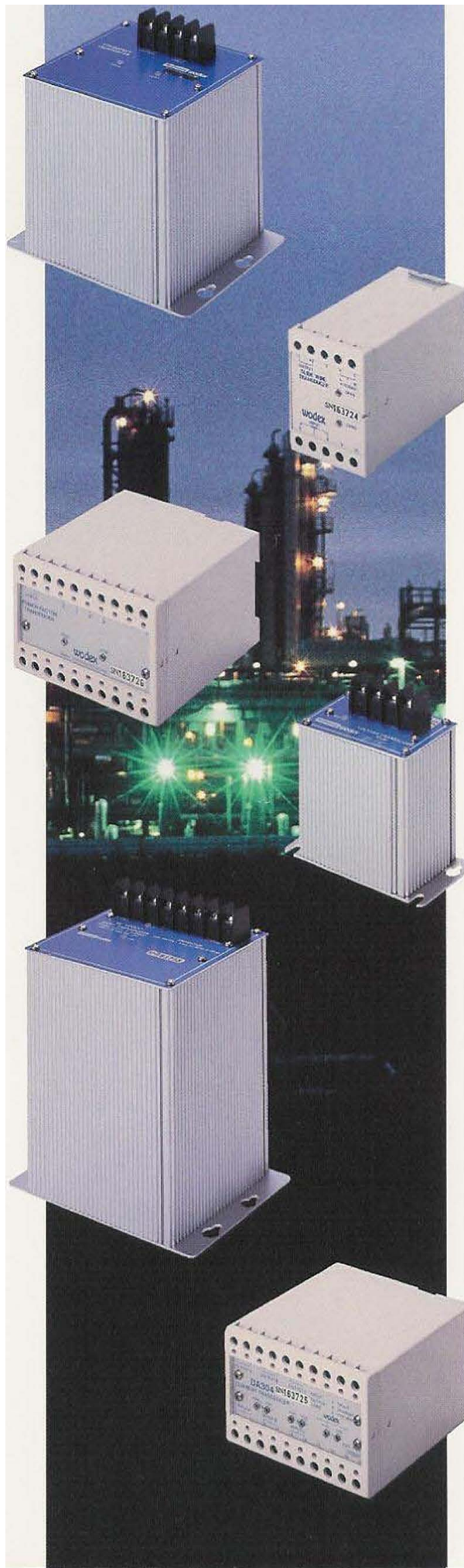
For producing a DC output linearly proportional to the phase angle difference between two inputs. Phase angle models compare two voltage inputs. Power factor models compare one voltage and one current input.

- ±1° of reading accuracy
- 0.005%/°C temperature coefficient
- 0.1%/year, long term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2 kV dielectric isolation
- Wide variety of input and output options
- Metal can or ABS DIN rail cases

RTD and Slidewire Transducers

Ultra linear devices for converting a variable inductance to voltmeter, current, or a process output. Inverse outputs are available for use with level measuring devices and systems.

- 0.2% of reading accuracy
- 0.005%/°C temperature coefficient
- 0.1%/year, long term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2 kV dielectric isolation
- Wide variety of input and output options
- Metal can or ABS DIN rail cases



Frequency Transducers

These devices use ultra-stable crystal technology to develop a DC signal output proportional to the input frequency.

- 0.02% of center frequency accuracy (0.01% accuracy optional)
- 0.001%/°C temperature coefficient
- 0.0005%/year, long term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2 kV dielectric isolation
- Wide variety of input and output options
- Metal can cases or ABS DIN rail cases

Line Post Sensor Transducers and Fault Alarms

Designed to interface with any line post current or voltage sensors. Facilitates installation of pole-mounted sectionalizing RTUs.

- 0.2% of reading accuracy
- 0.01%/°C temperature coefficient
- 0.1%/year, long term stability
- 2.5 kV transient protection
- 5 kV impulse protection
- 2 kV dielectric isolation
- Wide variety of input and output options
- Metal can cases

In addition to the preceding power transducers, MTECH offers all of the following products:

- **Service Entrance Modules:** A convenient way to provide a termination and distribution of the AC supply to a control cabinet. Also serves as a troubleshooting outlet. Available with (or without) surge arrestor and line filter.
- **Current Transformers:** Many configurations are available for many different applications, including ammeters, watt-meters, relays, cross current compensation, relaying and metering, and energy management systems and instrumentation.

TELECOMMUNICATIONS DEVICES

- **Telephone and Communications Line Isolators/Test Facilities:** For terminating a legacy 4-wire, 600 ohm telephone service. Provides equipment, line, and monitor jack positions. Protects the equipment from line side transients exceeding 50 volts line to line and isolates it from the line to a level of 3000 volts DC.
- **2-Wire, 10,000 Volt Version Available**
- **24 and 48 Volt Telecommunications Power Filters and Regulators:** For use in remote SCADA applications where TELCO active equipment is required. Rejects high level transients that occur on station batteries during fault conditions.

For more information on MTECH power transducers or on other of our products, contact a local representative or email/fax or call us directly as indicated below.



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