



MODEL AT-7800

ACCUTEMP

- Wireless, real-time rotor temperature readings
- Increased production throughput with improved overtemperature monitoring
- Faster motor restart times
- Early detection of motor faults due to temperature overage
- Reliable operation with no slip rings or batteries to wear out

TYPICAL APPLICATIONS

- Rotor temperature sensing for
 - Hot rolling mills
 - Cold rolling mills
- Brushless motor health
- Large industrial motor monitoring

ROTOR TEMPERATURE MONITORING

AccuTemp Rotor Temperature Monitoring System Model AT-7800 provides remote, real-time temperature measurements for a range of rotating equipment, allowing users to make more efficient and safer operating decisions. AccuTemp includes induction-powered temperature sensors on the rotor, and the system operates independent of rotor movement. This means that there are no slip rings or batteries to wear out, and measurements can be taken both while in motion and at stand-still.

AccuTemp is easily installed on existing rotor shafts and provides 8 channels or more of temperature measurements from a variety of RTD and thermocouple sensor types and wirelessly transmits measurement values to a stationary receiver. The data can be read via Modbus TCP over 10/100 ethernet or Modbus RTU over a USB virtual serial port.

The AccuTemp receiver unit includes a built-in LCD used for viewing temperature readings, evaluating system health, and configuring system operation. The system can also diagnose common sensor issues such as open or shorted wires or wrongly wired sensors.

Alternative temperature sensors and output data formats can be accommodated upon request.

SPECIFICATIONS		
Performance	RTD	Thermocouple
Channel Count	8	8
Temperature Range	-200 °C to 800°C	-256 °C to 1372 °C ^[1]
Temperature Resolution	0.1 °C	
Sample Period	250 ms/Channel/Module (1 second standard)	
Sensor Configuration	2/3/4 Wire	2 Wire
Sensor Types ^[1]	PT100, PT1000	K, T, J
Digital Output Interface	Modbus TCP over ethernet or RTU over USB	
Environmental		
Temperature Range (Transmitter)	32 °F to 167 °F	
Temperature Range (IPS/ RCVR)	40 °F to 140 °F	
Electrical		
Excitation Current	1 mA	N/A
Induction Power Frequency	142.5 kHz	
Data Carrier	13.5 MHz	
System Power	120 to 240 VAC 50 to 60 Hz, 1 A	
Mechanical		
Housing Material	G10 transmitter, stainless steel IPS and receiver	
Size (length x width x height)	Transmitter and pickup: application specific ^[2] Induction Power Supply: 10 x 8 x 4 in Receiver: 10.88 x 10.75 x 6 in	
Weight	Transmitter and pickup: application specific ^[2]	
Electrical Connector (input, sensor)	Pluggable terminal block	
Electrical Connector (output, device)	USB-B, 10/100 ethernet RJ-45	

[1] Reportable maximum limits for type K thermocouple.

[2] Design to meet customer equipment

