

# RT381 | Rotary Temperature Transmitter

*TempTrak® All-Digital Technology  
For Precise Godet Temperature Control*

The RT381 is a one-channel temperature measurement system designed as an upgrade for Fuji Electric FTM 1AA02-Z transmitters to monitor and control temperature on heated godet roll shells on filament spinning machines. The system features generous 8 mm clearance between the rotating and stationary parts which eliminates damage due to impact and rubbing. TempTrak® data communications technology is unaffected by dust or debris. Digital circuitry in the rotating transmitter and the stationary receiver are immune to electrical noise and drift. Fault detection modes protect heater from damage and expedite troubleshooting in the event of a sensor failure.



- Generous 8 mm rotor-stator clearance
- Replacement for Fuji FTM 1AA02-Z
- Digital circuitry from sensor input to signal output



## FEATURES

**Accurate** ■ Within  $\pm 1.0^{\circ}\text{C}$  across entire sensing range.

**Robust** ■ Fully encapsulated electronics with generous clearance between rotor and stator.

**Fully Compatible** ■ Easy replacement, works with existing wiring and process control systems.

**Digital Circuitry** ■ Maintains calibration and is immune to electrical noise and drift.

**Intelligent** ■ Protects heater if sensor or transmitter malfunctions.

**Product Support** ■ Backed by BEI's reputation for the strongest customer support in the industry including a two-year warranty.

BINSFELD ENGINEERING INC.

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## TYPICAL SPECIFICATIONS

### Rotor

Number of Sensors:	1
Input Sensor Type:	JPt 200 RT D (200 $\Omega$ at 0° C), Alpha = 0.003916 (JIS-1604)
Speed:	10,000 RPM (max)

### Stator

I/O Connector:	8 conductor screw terminal
I/O Signal:	551 to 6959 Hz for -10 to 300°C RTD temperature
Status Indicator Lights:	Power and Signal
Supply Voltage:	16 - 28VAC or 22 - 40VDC
Supply Current:	200mA (max), 100mA (nom)
System Accuracy:	$\pm 0.3\%$ of span ( $\pm 0.1^\circ$ over -10° to 300°C span) (max over operating temperature range)
Operating Temperature:	0 - 85°C

*Specifications subject to change without notice.*

### Warranty

Binsfeld Engineering Inc. warrants that its RT381 Series Transmitters will be free from defective materials and workmanship for a period of two years from the date of delivery to the original purchaser and that its products will conform to specifications and standards published by Binsfeld Engineering Inc. Upon evaluation by Binsfeld Engineering Inc., any product found to be defective will be replaced or repaired at the sole discretion of Binsfeld Engineering Inc. Our warranty is limited to the foregoing. Binsfeld Engineering Inc. disclaims any warranty of merchantability or fitness for intended purpose.

