

# TECO HK Series Microwave Consistency Transmitter

## Product Summary

The TECO HK Series of microwave consistency transmitters provide a versatile, safe and easy-to-calibrate means for measuring the consistency of paper stock. The HK Series can successfully measure broke, recycle or other difficult fiber types, independent of fiber length, freeness, flow rate or wood species.

Typically less than half of the cost of other microwave transmitters, the HK series microwave transmitters will measure the percentage of total solids of additives in water and percentage of moisture in wood chips with the same transmitter.

Applications include measurement and control of machine, recycle & broke stock, measurement and control of % total solids of starch additives, measurement and control of % solids (limestone, kaolin clay) in coatings.



## Features & Benefits

- High Accuracy - 0.1% or better
- Low cost – typically less than half the cost of other microwave transmitter
- Easy to install
- One point calibration
- Optional adjustable antenna units to maximize sensitivity to process conditions. Optional non-intrusive configuration
- Internally compensated for temperature
- No routine maintenance required. Install & forget
- Current and Digital Outputs. Contact closure
- Versatile – Same transmitter can be used in pipes, tanks, chests, belts & chutes

## Description

The TECO HK series of microwave consistency transmitters consist of a transmitter and a antenna body. Depending on the model, the transmitter and antennae body can be configured as a single unit, or alternatively, the transmitter can be mounted remotely from the antenna body (useful for harsh or high vibration environments). The antenna body itself can be configured with fixed or adjustable antenna, which permits the operator to maximize the sensitivity of the HK to his process conditions. The unit is available in an optional, non-intrusive configuration.

The HK unit is designed to be mounted in virtually any environment, from process pipes to chests. It can also be mounted to measure conveyer or chute stock, such as wood chips.

The HK unit is equipped with a Pt RTD for stock temperature compensation. The unit can optionally be equipped with a display for at-line or remote measurement display.

## Specifications

Accuracy	± 0.1% consistency or better
Range	0.5% and up. As low as 0.25% under certain conditions
Display	2x24 character LCD, LED Backlit; dialog with pushbuttons and alphanumeric display
Power	115/230V, 47-65Hz, 50VA consumption
Housing	IP65, NEMA 4 (Aluminum)
Weight	11 pounds
Dimensions	9"x7.9"x4.3"
Analog Output	Two 0/4-20ma active, isolated outputs. 500 ohm max resistance
Analog Input	One 0/4-20ma non-isolated input, 125 Ohm max load.
Communications	Two Com ports, RS232, Optionally RS485.
Relay	One 250VAC, 30VDC, 1A contact
Microwave	ISM band, 2.45 Ghz, 1mW, 0dBm
Sensitivity	-80dBm, 1nW
Operating Temp	-20° to 85° C
Sensor Operating Temp	-30°-170°C (Optionally 250° C)
Storage Temp	-30° to 95° C
CE Mark	Yes
Noise Immunity	IEC 801 part 1-5
Radiation	EN55011 Teil B
Instrument Safety	IEC 1010-1

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