



TPM CAL KIT

7006A250

The Bird TS-TPM calibration kit provides a portable, highly accurate transfer standard to calibrate the TPM. The In-Situ Calibration feature of the TPM allows you to never have to remove it from service and return it to the factory for yearly calibration. This keeps you ON AIR with reliable power measurements traceable to NIST. On the calibration schedule you set for your TPM, simply connect the Terminating Power Sensor to the TPM, compare the readings and make any necessary adjustments. You will control your own calibration schedule while maintaining your traceability and meeting or exceeding FCC guidelines for RF Power Monitoring.

KIT INCLUDES:

TPM Transfer Standard, Digital Power Meter 5000EX, Tool Adjustment, Hard Carrying Case.

FAQ:

Q: Do I need to calibrate the TPM for both forward and reflected power?

A: In an ideal situation, calibrating both ports would be best. However, since the FCC only requires accurate forward power measurement, calibrating the reflected port is suggested but not necessary.

Q: What is the ideal power for TPM calibration?

A: For the greatest accuracy, calibration should be performed at standard operating power. This removes any issues with linearity on the TPM. In addition, calibration lower than 10% of full scale (for forward or reflected) is not suggested, as any error would be amplified at higher power levels.

Q: Do I need to send the 7006A250 Calibration Kit in for recalibration?

A: Only the TS-TPM-1 Transfer Standard needs to be recalibrated. This should be done yearly, but since it is not integrated into the transmission system, this recalibration won't cause any downtime.

Q: Can I use any reference for calibrating the TPM?

A: Yes, but the calibration may not be traceable to NIST. For operating powers and frequencies, the TS-TPM-1 has a NIST traceable accuracy of $\pm 2\%$. If you use a less accurate reference or one that's not NIST traceable, the overall error budget will be worse than factory calibration.



OPERATING CHARACTERISTICS

Frequency Ranges	50-900 MHz
Power Range	+10 dBm to -20 dBm
Measurement Type	True Average Power, Terminating
Peak/Average Ratio	10 dB maximum
Accuracy	$\pm 2\%$ of reading
Outputs	RS-232
Displays	5000EX Digital Power Meter

GENERAL SPECIFICATIONS

Operating Temperature	-10° to +50° C (14° to 122° F)
Storage Temperature	-40° to +80° C (-40° to 176° F)
Humidity	95% $\pm 5\%$ max. (noncondensing)
Altitude	up to 15,000 feet (3048 m)
Weights	7.2 pounds
Calibration cycle	Annual (TS-TPM-1)



RF Measurement and Management in Your World



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