

Freeland Scientific Wireless Temperature Probe

Freeland Scientific's Wireless Temperature Probe is a robust solution for tracking temperature in composting material. It provides evidence to meet regulatory requirements for temperatures during processing in open windrows and in-vessel composters. It's a dedicated, robust, end-to-end solution. Each probe sends data wirelessly to an on-site PC, recording temperature change over time at individual locations.

Technical Specifications

Probe Sensing

Sensing Range	-50 to 200	°C
Accuracy over entire range	±0.5	°C
Sensor Technology	PT-100 PRT	
Minimum battery life (2 readings per hour)	12	months
Battery operating temperature range	-40 to 60	°C
Minimum reading interval	20	s

Probe Mechanical

Environmental protection	IP68	
Body material	A2 stainless steel	
Body wall thickness	3	mm
Body outer diameter	21.3	mm
Handle length (each handle)	80	mm
Probe lengths (standard)	1.5, 2	m

Wireless Networking

Operating frequency band	868*	MHz
Range (outdoor, line of sight)	1	km
Network topography	mesh	
Maximum number of units per network	>100	

PC / Software[†]

Operating system	Windows 7 onwards with admin login
Wireless network interface connection	1 spare USB port
Data collection application	Local Windows service
Data viewing application	Windows application
Data storage	Secure online database with daily backups

* Other frequencies are available for non-European markets: please contact Freeland Scientific for details

[†] A 2G gateway is currently under development for use in areas with mobile phone coverage: this gateway operates without the need for a PC.