

9. Technical Specifications

9.1. Main Instrument

Protection Rating	IP54
Voltage Supply	18 V DC (only use supplied charger)
Operating temperature	-10 – 40°C
Storage temperature	-20 – 50°C
Charging temperature	0 – 50 °C
Battery life	4 hours (typical)
Recharging time	8 hours (typical from flat)
Aspiration rate	500 ml/min (typical)
Dimensions	268 × 154 × 86 mm
Weight	2.4 kg
Data storage capacity	2200 sampling points

9.2. Instrument Charger / PSU

Supplied mains adaptor heads	UK, Euro, & US
Mains line voltage	90 – 264 VAC
Mains frequency	47 – 63 Hz
Operating temperature	0 – 40 °C
Storage temperature	-10 – 70 °C

9.3. O2 Sensor

Operating Principle	galvanic fuel cell
Measuring range	0-21 % (v/v) O ₂
Accuracy	better than ± 0.5 % (v/v) O ₂
Calibration interval	daily in air, yearly zero
Expected lifespan	1-2 years

9.4. CO2 Sensor

Operating Principle	non-dispersive infrared (NDIR) dual wavelength detector
Measuring range	0-40 % (v/v) CO2
Accuracy	better than ± 0.5 % (v/v) CO2
Calibration interval	yearly
Expected lifespan	> 5 years

9.5. Moisture Sensor

Operating Principle	Proprietary electronic measurement
Measuring range	25-65 % moisture (w/w) in green waste compost
Accuracy	better than ± 10 % (w/w) moisture
Calibration interval	yearly
Expected lifespan	life of probe

9.6. Temperature Sensor

Operating Principle	K-type thermocouple with cold junction compensation
Measuring range	ambient temperature to 80°C above ambient temperature up to a maximum of 95°C
Accuracy	better than ± 2 °C over calibrated range
Calibration interval	yearly
Expected lifespan	life of probe



9.7. Barcode Scanner

Dimensions	157 × 46 × 34 mm
Weight	263 g
Storage temperature	-20°C – 60 °C
Charging temperature	0 – 35°C
Protection rating	IP52
Drop Survival	26 drops onto concrete or steel from a height of 1.8 m
Ambient light	Any lighting condition; 0 – 100 000 lux
Battery life	> 2000 scans
Recharging time	3 hours
Expected lifespan	> 10 years
Radio frequency band	2.4 GHz
Radio type	Bluetooth® Class 1 version 1.2
Light Source	617 nm highly visible LED

9.8. Probe

Dimensions	1.42 × 0.25 × 0.05 m (including handles)
Weight	2130 g
Body material	Stainless steel

9.9. Legal & Environmental

Patent Application Numbers	UK: 0801757.6 International: PCT/GB2009/050078
WEEE producer registration	WEE/DA0482SW
	This system is CE marked
	The mains power adaptors supplied with this unit meet with UL requirements