

Appendix B Technical Data

B.1 List of STS Specifications

Description		Value
Physical Dimensions		
Dimensions (W x L x D)	[Mm]	70 x 200 x 90 mm
Weight Without Filter	Gram	400 gr
Electrical and Power Parameters		
Input Power	[V]	3.7V Rechargeable Battery with protection, model 18650.
Charging Adapter Input Voltage	[V]	110 to 230VAC, 50 to 60 Hz
Charging Cable Type	Operating sessions	Serial interface USB 2.0 (for battery charging)
Service	Operating sessions	400 operating sessions between charge cycles
Sample Rate	kHz	1 kHz
Pressure Sensor		
Sensor Type		MPXV7025 Series Integrated Silicon Pressure Sensor On-Chip Signal Conditioned, Temperature Compensated and Calibrated.
Pressure Range	kPa	±2kPa
Output Signal	[V]	From 0.2 to 4.7 VDC
Sensitivity		90 mV/kPa
Response Time	msec	1 msec
Flow and Volume		
Flow Range	L/sec	14 L/sec
Flow Accuracy	Flow	±2% or 0.02 L/s (except PEF) PEF: ±5% or 0.5L/min
Volume Accuracy	[mL]	± 2.5% or 50 mL
Operating Conditions		
Temperature		5°C to 40°C (41°F TO 104°F)
Humidity		20% to 95% (non-condensing)
Atmospheric Pressure		850 hPa to 1060 hPa
Storage Conditions		
Temperature		-20°C to 50°C (-4°F TO 122°F)
Humidity		5% to 95% (non-condensing)
Atmospheric Pressure		500 KPa to 1060 hPa
General		
Respiratory Tube	Off-the-shelf filters	See page 8
Languages		English
IP Code		IP20
Lifetime		10 years