

S503 Humidity Calibrator



The S503 Humidity Calibrator enables users of humidity sensors, transmitters and portable devices to quickly and accurately generate a stable humidity in a test chamber to validate or calibrate sensors.

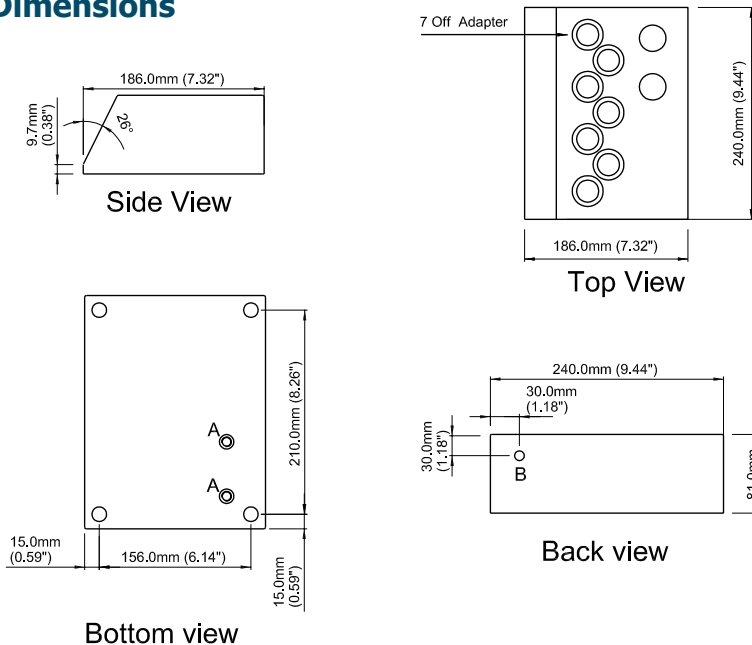
Highlights

- Generates humidity levels between 10–90% RH
- Highly portable
- Fast stabilisation of chamber humidity
- Independent reference hygrometer – optional
- Multiple sensors can be calibrated at the same time

Technical Specifications

Humidity	
Generation range	10–90% RH in steps of 0.1% RH
Accuracy	±2% RH or better (5–95% RH)
Stability	Better than ±0.5%
Stabilisation time to set point	<10 minutes
Temperature	
Temperature accuracy	±0.3°C / ±0.54°F
Operating temperature (ambient)	15 to 35°C / 59 to 95°F
Sensor under Calibration	
Voltage read out	0–1, 0–5 + 0–10 VDC
Current read out	4–20 mA
Voltage supply	15 VDC, ±10% at 30 mA max
General	
Probe ports	7 off – sensor body diameters 5 to 25mm / 0.2 to 0.98" accommodated by port adapters
Desiccant chamber	25g / 0.88oz capacity
Saturation chamber	25ml capacity, distilled water
Display	3½ digit LCD, 13mm / 0.5" characters
Supply	12 VDC (100 with 240 VAC adapter included)
Weight	1.85kg / 4.08lb

Dimensions



Notes:
 Hole A = Drain hole with cap
 Hole B = Power hole for adapter

Accessories and spare parts

Moulded polymer housing port adapter for 8.0mm / 0.31" probes from ø18.5mm / ø 0.73"	A000180
Moulded polymer housing port adapter for 12.0mm / 0.47" probes from ø18.5mm / ø 0.73"	A000190
Aluminum adapter (M30x1) and blind stop for customer modification (special port adapters are available on request)	A000280
Special modified port adapters ø client specific	A000280X
ø12.0mm / ø 0.47" port adapter. Aluminum adapter (M30x1) and blindstop	A000281
ø13.5mm / ø 0.53" port adapter. Aluminum adapter (M30x1) and blind stop	A000282
ø14.0mm / ø 0.55"port adapter. Aluminum adapter (M30x1) and blindstop	A000283
ø15.0 mm / ø 0.59"port adapter. Aluminum adapter (M30x1) and blindstop	A000284
ø18.5 mm / ø 0.73"port adapter. Aluminum adapter (M30x1) and blindstop	A000285
ø19.0mm / ø 0.75"port adapter. Aluminum adapter (M30x1) and blindstop	A000286
ø24.0mm / ø 0.94"port adapter. Aluminum adapter (M30x1) and blindstop	A000287
ø25.0mm / ø 0.98"port adapter. Aluminum adapter (M30x1) and blindstop	A000288
Tool for changing M30 Aluminum adapters	A000265
Carrying case	A000230
Optidew Vision reference hygrometer with sensor	OPT-V-01
Stainless steel port adapter (M30x1)	A000272
Moulded polymer housing port adapter ø18.5mm – ø3.0mm / ø 0.73 – ø 0.19" prt probe for Optidew Vision	A000273
0.25kg / 0.55lb desiccant (orange)	A000171
Blind stop ø 18.5mm / ø 0.73"	A000200
Water bottle	A000242
Control sensor	HX-757

Order codes

Digital Humidity Generator, including desiccant, 7 port adapters, power adapter, calibration certificate and adaptor tool	S503-DIG
S503-DIG with extended chamber (0.54 litre extra)	S503-DIG-LC
S503 Calibration Kit, including DM-509-TX reference hygrometer with calibration certificate, 5 pieces ø12.0mm / ø 0.47" adapter, 2 pieces ø8.0mm / ø 0.31" adapter, carrying case, desiccant, distilled water, 3 adjustment tubes and adaptor tool	S503-DIG-SET
S503 Calibration Kit, including carrying case, Optidew adapters (A-000272 & A000273) and 5 port adapters to be specified	S503-DIG-OPT



Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: S503_97199_V1_UK_1009