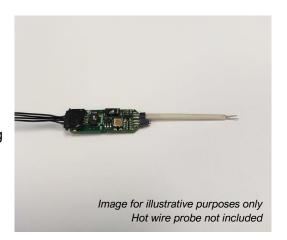
ULTRA-MINIATURE HOT-WIRE ANEMOMETER SYSTEM



This ultra-miniature analogue constant-temperature hot-wire anemometry system is a fully self-contained, economical solution for high-bandwidth turbulence measurements with low noise susceptibility and minimal flow blockage. This unit is compatible with market-leading hot-wire probes.

- World's smallest self-contained hot-wire anemometry system
- Square-wave bandwidth of up to 40 kHz, with no possible instability
- Integrated square wave tester and bias setting
- Integrated 4th order analogue output filter
- Integrated analogue output gain
- Compatible with leading probe brands



Specification

Product code	MUHW-1A	
Velocity range	min. 0 m/s ¹	max 120 m/s
Maximum bandiwdth ²	40 kHz	
Wire cold resistance range (fixed)	$3.5~\Omega\pm1~\Omega$	
Overheat ratio (fixed)	1.7	
Power requirement	min. 500 mW idle	
Supply voltage (regulated)	min. 4.5 VDC	max 5.5 VDC
Output signal range	± 5 V, including analogue amplification	
Maximum operating temperature	125° C	
Output signal conditioning	Fixed 4 th order active Butterworth low-pass filter	
Connector type (cable)	4-way Molex Pico-lock (15131-040)	
Connector type (probe) ³	Suitable for 1 mm pitch, 0.45 mm dia. x 2 mm long straight prong leads	

¹ Limited by buoyancy plume effects; values below 1 m/s in air may be affected. May depend on fluid and conditions.

² Established by square-wave test

³ Hot-wire probe not included.

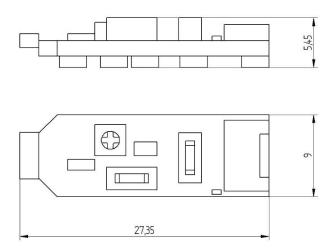
ULTRA-MINIATURE HOT-WIRE ANEMOMETER SYSTEM



Additional custom modifications available:

- Compatible probe recommendation and supply
- Insulated/IP-68 enclosures for conductive fluids
- Extension leads and sockets and/or compatible probe-holders
- Extended product support and warranty

Dimensions



The content of this datasheet is for general information only and is subject to change without notice. It may contain inaccuracies or errors and Surrey Sensors Ltd. expressly exclude liability for any such inaccuracies or errors to the fullest extent permitted by law. Your use of any information is entirely at your own risk, for which Surrey Sensors Ltd. shall not be liable.