



EASY-TO-READ & DURABLE ELECTRIC GAUGES, TACHOMETERS & SENSORS

MURPHY®

by **INNOVATION** CONTROLS

ELECTRIC GAUGES & TACHOMETERS EG(S) & AT(H) series



2 in. and 3.5 in. gauges for engines, vehicles & equipment

At-a-glance, analogue display of critical equipment parameters

Smooth and accurate pointer movement, non-glare backlight

Rapid-fit, environmentally sealed and durable cases

Swichgage® output models for alarm and auto shutdown

Resistive sender and magnetic pickup sensors



Murphy electric gauges and tachometers take equipment instrumentation to new heights, with leading-edge technology and proven reliability. Smooth and accurate pointer movement, non-glare backlight and case design set new benchmarks in readability and durability.

EG(S) pressure, temperature and fuel level models are driven by electrical connection to ES series resistive measurement senders. DC battery voltage and current gauges are also available. EGS Swichgage models include an output that activates at a user-set fault limit, for triggering alarm or equipment shutdown.

For AT(H) tachometers, all our latest models can measure engine speed through either charge alternator, magnetic pickup or inductive ignition signals. Speed calibration is

simplicity itself, using a single push-button procedure. ATH models include an LCD engine hourmeter.

All models feature environmentally sealed, durable cases with spin-on clamp for rapid panel installation. EG(S) gauges are intended for 2 in./52mm round panel apertures; standard models include a 12V or 24V plug-and-latch wiring harness. AT(H) tachometers are intended for 3³/₈ in. / 86mm cut-outs.

While EG(S) and AT(H) series instruments are designed for use with electrically driven sensors, typically mounted on non-ECU 'mechanical' engines, both gauges and sensors can also be integrated with the latest ECU/CAN/J1939 engines and equipment – see our Accessories section over the page.

ELECTRIC GAUGES & TACHOMETERS

EG(S) & AT(H) series

STANDARD SCALES*

EG(S)21	Pressure	0 - 100 psi / 0 - 7 bar 0 - 400 psi / 0 - 28 bar
	Temperature	40 - 120°C 60 - 150°C
	Fuel level	Empty - 1/4 - 1/2 - 3/4 - Full
	DC voltage	8 - 18 V 16 - 36 V
	DC current	-60 - 0 - +60 A
AT(H)	Engine speed	0 - 3000 RPM

ACCESSORIES

EG(S) gauges and AT(H) tachometers are designed to work with engine-mounted sensors on 'mechanical' (non-ECU) engines, but can also be integrated with the latest ECU/CAN/J1939 engines and equipment. See our separate literature for full details and specifications of the products below:



ES series senders

Equipment-mounted resistive sensors for use with EG(S) series pressure, temperature and fuel level gauges. Available for ground or insulated return wiring, with a range of scales, fittings and adaptors.



Magnetic pickup speed sensors

Flywheel or gearwheel speed transducers for tachometers, engine controls and displays.



CANdrive™

Converts ECU-transmitted CAN/J1939 data into signals for driving EG(S) gauges and AT(H) tachometers.



FuelCAN™, MeCAN™ & SenderCAN®

Compact surface-mount or in-harness interfaces for CAN I/O integration. For use with input switch and analogue signals (e.g. resistive senders) or output indication and control. Standard and custom models.



PowerView® Gauges

Alternative data-driven, IP68 sealed gauges for CAN/J1939 engines and equipment.

FEATURES & SPECIFICATIONS*

	EG21 gauge EGS21 Swichgage®	AT tachometer ATH tachometer
Electrical		
Power supply	12 VDC gauge head. Standard models are supplied with either 12 VDC (10 - 16V) or 24 VDC (20-32V) wire harness.	10 - 32 VDC
Input signal	ES series resistive senders, insulated or ground return (pressure, temp or fuel level) or CANdrive J1939 data convertor.	1.5 - 140 Vrms 2.5 Hz to 25 kHz (charge alternator, magnetic pickup or inductive ignition)
Alarm output (EGS Swichgage models)	PowerHall® switch, active low during fault, 300mA max	-
Gauge face		
Nominal size	2 in.	3.5 in.
Scale	white numerals over black background	
Indicating pointer	white, mirror band background for reduced parallax reading error, silicon damped Air-Core movement	white, 240° sweep
LCD hourmeter	-	0 - 99999.9 hourmeter (ATH models only)
Backlight	red LED, non-glare	
Physical		
Case/lens/bezel material	Polycarbonate (PC)/ Polyester(PBT)	Nylon, 12% glass-filled
Lens	Clear polycarbonate, UV-stabilized	Tempered glass
Bezel	Black or bright stainless steel	
Connectors	6-way push-on & latch (supplied with 8in./203mm wire harness on standard models)	3 x 10-32 UNF-2A studs (supply/signal); 1 x 1/4in./6mm spade (backlight)
EGS Swichgage level adjustment	1/16 in. hex key at rear, limit visible on mirror scale	-
Environmental testing / sealing	SAE J1810	IP66 front, IP32 back (vented case)
Operating temperature	-40 to +85°C / -40 to +185°F	

* Models with indicating scales above (and black bezels) are standard items in EMEA regions. Please see separate sales bulletins and installation instructions for details of full model options, specifications and operation. PowerHall® is a trademark of Allegro MicroSystems Inc.

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