#### **PRODUCT DATA SHEET**



edwardsvacuum.com

# ACTIVE DIGITAL CONTROLLER (ADC)

Edwards Active Digital Controller (ADC) is a compact single line vacuum gauge controller and display, featuring a bright LED display and simple push-button controls. The ADC automatically recognises compatible Edwards gauges, loads the appropriate look-up table and displays the pressure in commonly used vacuum units.

The ADC is available in standard and MkII enhanced versions.

The ADC standard controller displays the pressure measured by a single active gauge. The MkII enhanced controller now supports two different gauges with two variable hysteresis set- points which are linked to 48 V d.c. 1A changeover relays and two 0-10 V d.c. analog outputs. To aid system integration the enhanced controller is provided with an RS232 interface.

When combined with suitable gauges such as the Edwards APG200, WRG200, AIM200 and ASG2 ranges, the ADC represents a cost effective means of monitoring and controlling process vacuum in a broad range of applications.



## Features and benefits

Plug and Go operation

- Simply plug in the mains supply, connect the gauge and the ADC displays the measured pressure

### • Wide pressure range

- ADC supports Edwards gauges with a total measuring range of 2000 to 1 x  $10^{-9}$  mbar (1500 to 7.5 x  $10^{-10}$  Torr)

- ADC and Edwards gauges address a broad spectrum of laboratory and industrial applications

### • New multiple gauge ability

-The enhanced ADC MkII can support two different gauges making it a more versatile instrument controller

High visibility display

- Bright LED display gives clear long distance readability

- Choice of units

   ADC displays in mbar, Torr, Pascal or Volts
- Compact instrument

   Small 1/8 DIN enclosure, may be panel or bench mounted
- Very simple to use

- Push-button control makes operation highly intuitive

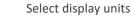
# **SPECIFICATIONS**

### Standard version





#### Front panel button



### MkII enhanced version



### Enter/Select button

Turn the selected gauge on or off Edit the selected numerical item Move to the next digit of a numerical value

Scroll	up button
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Move to previous selection Scroll selected numerical values up



Scroll down button

Move to next selection Scroll selected numerical values down

- G1 & 2 Indicates gauge displayed
- SP1&2 Indicates set-point trip
- Indicates high and low set-point threshold for setting up Hi, Lo
- CAL Indicates calibrate message sent to gauge

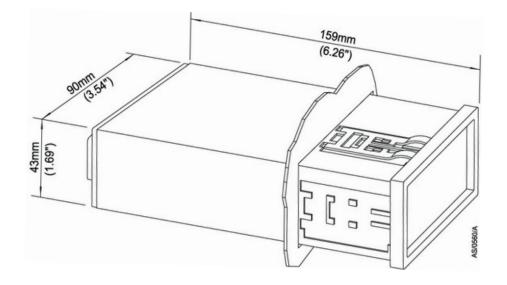
(remote calibration supporting gauges only)

# COMMON INTERFACES AND CONFIGURATION DETAILS

			Standard	Enhanced
Active gauge		APG series (including 200, legacy APG and APGX-H), WRG series (including 200 and legacy WRG)		$\checkmark$
compatibility	AIM200, AIM-S, AIM	AIM200, AIM-S, AIM-X and ASG2		$\checkmark$
Display	High brightness green LED display 12mm (0.47" high) Units - mbar/Torr/Pa/Volts		$\checkmark$	$\checkmark$
Electrical supply	100 to 240V a.c. 47 to 63Hz		$\checkmark$	$\checkmark$
Serial interface	RS232 serial interfac	RS232 serial interface allows the ADC to be linked to a PC, PLC or OEM system controller		$\checkmark$
	RS232 Protocol - 960	RS232 Protocol - 9600 baud, 1 stop bit, 8 data bits, no parity		$\checkmark$
May be used either to link to system relays, or a higher-level control system and includes:			$\checkmark$	
	Analog outputs	One 0-10V d.c. output signal per gauge channel		$\checkmark$
Logic interface	Set-points	One user programmable, variable hysteresis set point per gauge channel		$\checkmark$
	Control relays	Two volt-free, single pole change-over relays tied to the respective programmable set-points: 1A @ 48 V d.c. 2A @ 24 V d.c.		~

# DIMENSIONS, MOUNTING OPTIONS AND WEIGHT

Panel cut-out	92 <sup>+0</sup> . <sup>8</sup> x 45 <sup>+0</sup> . <sup>6</sup> mm (3.62" x 1.77") to DIN43700
Panel thickness	1.5 mm (0.06") min
Weight	0.33 kg



## ENVIRONMENT AND STANDARDS COMPLIANCE

Operating and storage data	
Operating temperature	0 to +40 °C
Storage temperature	-30 to +70 °C
Max ambient operating humidity	90% RH non-condensing at 40°C

Standards	
Electrical safety	BS EN 61010-1 2001
Electrical noise immunity	BS EN 61326 (Industrial location, class B emissions)
Flame retardant case materials	UL94 V1
Enclosure rating	IP40

# **ORDERING INFORMATION**

ADC standard, CertificatedD3959000CADC MkII Enhanced, CertificatedD3959150CThe above controllers are certificated on their own without gauges. Contact Edwards for controllers certificated with Active gauges as a set.DInterface cablesD39700834Zm RS232 interface cableD39700834Mains cablesD40013025Zm UK plugD40013025Zm Northern European plugD4001300Example compatible gaugesD1G1011100Alf200 - X NW25D2G0021100WR6200 - X NW25D3G0021100Cost e gauge cableD40001005Im Active gauge cableD4000100S Active gauge cableD4000100Im Active gauge cableD40001050Im Active gauge cableD40001050S Active gauge	Product description	Order number
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