Specifications

	Vortex	Vortex Rack/Panel
Size	440 x 640 x 332mm (17.3 x 25 x 13 ins)	450 x 330 x 289mm (17.6 x 13 x 11.4 ins)
Weight	70Kgs (154lbs) approx.	37.5kgs (83lbs) approx.
Enclosure material	LM25 aluminium with polyester powder coating	
Ingress protection	IP66	
Channels	Up to 12 (1 to 3 4-way input modules)	
Operating temperature	-10°C to +40°C (14°F to +140°F)	
Humidity	0-95% RH non-condensing	
Inputs	**Gas** 2 or 3 wire 4-20mA (sink or source), 0-5V	
	Fire – smoke & heat detectors, manual call-points Up to 3 loops, Up to 20 devices per loop	
Outputs	**External audible/visual alarm drive** Via relays, four 24Vdc 0.5A supplies provided.	
Relays	**Type** Up to 32 SPCO with bus extension module	Relay limitations: 1 or 2 input modules: 2 relay modules max. (16 relays) 3 input modules: 1 relay module only (8 relays)

	Assignment – Common Battery back-up not available	
	Assignment – Voting Alarms, faults and system events	
	Relay modes Energised/de-energised, latched/non-latched, time-delayed, pulsed	
Digital communications	DCS/PLC/PC: RS-485 Modbus or Profibus Local configuration link: RS-232 (configuration software and lead supplied)	
Event logging	Up to 300 alarm, power, fault, system events are stored in Non-Volatile Memory	
Panel indication	Channel number: 2-digit 7-segment Green LED Gas reading: 4-digit 7-segment Red LED Measurement units: % LEL, ppm, % Vol, Fire Power: Green LED Battery OK: Green LED Run/hold indication: Green LED Channel test mode: Flashing Amber LED System fault – integrity watchdog: Amber LED Displayed information can be altered and outputs can be inhibited during calibration using a magnetic key	
Alarm indication	Audible – internal sounder: Piezo Visual – Alarm: Level 1 & 2, Red LED; Fault – Per channel, Amber LED; Inhibit – Per zone, Amber LED	
Power	AC mains/DC: 110 or 240Vac 3.2A max 150W PSU 20 – 30Vdc	85 – 264Vac 0.8A max 75W PSU 20 – 30Vdc
	Battery back-up: not available	
Approvals	Low voltage directive: EN61010-1 EMC: Directive 2014/30/EU: EN50270, FCC: CRF47 Part 15, ICES-003 ATEX: Ex II 2G D Zone 1, Zone 2, IECEx optional	
Functional safety	Validated to IEC61508	