Model 350IS & 355IS Intrinsically Safe Weight Indicators

NOVA WEIGH

- **ATEX certified for both gas and dust hazards**
- **Built-in control programs for filling, dosing, counting and check-weighing**
- **Choice of LCD, LCD backlit and LED displays**
- **Mains operation or 200 hr continuous use long life battery**
- **Approved for legal-for-trade weighing**
- **Stainless steel IP66 enclosure**
- **355IS has data keypad and Function Keys**
- **Choice of interfaces via fibre-optic link to optional safe-area hub**
- **Perfect choice for scales and vessel weighing in paint, ink and gas handling plants or areas where dust explosion risks might occur**

350IS with LED display

Model 350IS and 355IS safe weight indicators

The 350IS and the 355IS are ATEX certified digital weight indicators ideal for a broad range of industrial weighing applications in areas where there is a risk of a flammable atmosphere being present due to gas or dust releases. These instruments are derived from the highly successful 350 and 355 indicators and share most of the features that have made these units so popular as economically priced high specification weight indicators.

Both instruments can be supplied with either an intrinsically safe power supply (suitable for location in either the safe or hazardous areas) or with a rechargeable 200 hr continuous use, long-life, battery unit. The battery version makes it practicable to use these instruments with mobile scales and other applications where a mains power source is not available.

A choice of display types includes LCD, LCD backlit and LED. Battery life is greatest with the LCD display.

The 350IS has a five-function keypad with zero, print and tare functions etc. The 355IS also includes a numeric keypad to allow setpoints to be entered when using the instrument for batching or dosing. Two intrinsically safe remote inputs can be used to initiate Tare, Print, or Zero.

Interfaces to safe area equipment

A stand-alone application does not require any access to the safe area for power cabling etc. When outputs are required to connect to supervisory control systems then this can be achieved via a ‘hub’ located in the safe area. A fibre-optic link to the hub carries weight data and this is converted at the hub to a range of interfaces, e.g. 4 – 20 mA, RS 232, RS485, 20 mA serial, as well as programmable setpoints.

Technical Specification

Performance	
Display resolution	20-bit ADC, 100,000 displayed, 1,000,000 internal
A/D conversion rate	60 Hz
Calibration method	Menu driven via keypad. Multi-point linearisation.
Load cell circuit	5 Vdc (optionally 8 Vdc) with 6 wire connection including sense circuit
Signal range	0.1 m V/V min - 10 mV/V max.
Filtering	Selectable via menu
CE marked	Meets the requirements of the Low Voltage, EMC, NAWI and ATEX Directives
Legal-for-trade	EC type approved for 6,000 div.
User interface	
Display size and type	LED: 6 digit 22 mm high characters plus 12 LED annunciators for operational status LCD: 6 digit 25.4 mm high characters plus 12 LCD annunciators for operational status. Built-in LCD status bargraph. Low battery and dead battery indication.
Keypad - 350IS	5 key durable elastomeric
Keypad - 355IS	22 key durable elastomeric
Hazardous area interfaces	
Input for remote control	2 x intrinsically safe digital input can be allocated to tare, print or zero functions.
Serial	2 x RS232 ports used to connect to appropriately EEx i rated repeat weight displays
Safe area interfaces (optional)	
Link to safe area	Fibre-optic link connected to a 'hub' in the safe area. Max. distance 60 m with plastic fibre or 300 m with hard-clad silica fibre.
Interfaces to hub	One RS232 port as standard, can optionally be equipped with 4 - 20 mA analogue, RS485 & 20 mA serial and programmable setpoints.

Power supply options	
Mains power supply	Wall mounting stainless steel unit can power two indicators (only in specified Zones and Gas Groups). Universal ac input 90 - 250 Vac, 50/60 Hz. Power extension cables available (7.5 m & 15 m) as options.
Battery	Stainless steel enclosure mounts to the indicator swivel bracket. 200 hrs continuous use with LCD display and one load cell, 100 hrs with LED display and one load cell. Charge time 3.5 hours. **Battery charging must be performed in a non-hazardous area** **Note**: 'Sleep modes' selectable to conserve battery life
Construction and housing	
Enclosure	304 stainless steel with swivel brackets
Protection	IP66
Cable access	Via compression glands
Environmental	
Operating temperature	-10 - +40°C
ATEX Certification	
350/355 mains versions	II 1 GD EEx ia IIC T4 (IIB with dual output PSU)
350/355 battery versions	II 1 GD EEx ia IIC T3

355IS with LCD display and rechargeable battery unit

Get It 1st Right First Time

NOVA WEIGH

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BS EN ISO 9001:2000 Cert No: FM 11445