

# Model 460 & 465 Digital Weight Indicator

# NOVA WEIGH

## A flexible weight indicator for a wide range of weighing functions

The model 460 and 465 weight indicators are powerful enough to solve complex weighing tasks but maintain competitive pricing to make it suitable for all general weighing requirements. Custom weighing solutions can be easily created with the powerfully built-in macro programming language.

The 460 series is equally at home when used for vessel weighing or with platform scales - including legal for trade applications.

### Fully Featured

Even in its basic form, the 460 series is well equipped.

- A large six digit weight display plus a ten character dot matrix for scale status and operator prompting
- Two serial ports can be connected to auxiliary devices - eg displays, printers or bar code readers
- Built-in batching programs to provide either single speed filling with up to eight ingredients, or coarse and fine control with up to four ingredients.

- A weighing indicator and flexible programmable controller in one unit
- Powerful built-in macro programming language to create custom solutions
- Two programmable serial communication ports
- DC operation suitable for mobile weighing
- Expandable plant interface - up to 16 inputs/outputs
- European legal for trade approval



465 digital weight indicator

The 465 indicator combines all of the above features plus a numeric keyboard for easy entry of set point values. This is ideal for applications where target weights are frequently altered.

Both models feature a day/date clock with optional battery backup.

Optional I/O via plug in cards can be added to provide up to 16 I/O.

An optional multi scale input is available for simultaneous monitoring of two scales.



460 digital weight indicator

## TECHNICAL SPECIFICATION

### Weighing Performance

Resolution	100,000d (± 500,000 internal)
A/D conversion	60 Hz
Flash memory	512k bytes
Calibration	Selectable, 5 point linearisation or enter LC mV/V FS
A/D filtering	FIR (Finite Input Response) filter with selectable display update rate
Units of measure	4 user defined per scale
Custom units	2 user defined per scale (ie tons)
Zero adjustment	Selectable, 0.01 - 100% FS
Span adjustment	0.1 - 20 mV/V
Non-linearity	0.005% FS, LC dependent
Operating temperature	-10°C - +40°C
Excitation power	12 - 350 ohm bridges
Input signal connections	4 or 6 conductors with sense leads
Excitation current	350 mA, short circuit protected
Excitation voltage	10 VDC short circuit protected
Time/Date clock	Volatile, battery backed optional
Warranty	2 year limited

### Electrical

Power input	AC, 90 - 250 VAC, 50/60 Hz DC, 10 -32 VDC
Fuse	0.5 A slo-blow (when using AC power)

### Setpoint I/O

I/O scan rate	16 ms maximum
Number of I/O	8 maximum physical, optional 16 total (8 physical, 8 logical)
I/O timer resolution	10 ms
Remote contact input	2 total for Tare, Print, Start, Stop, etc Invokes macros 6 & 7 if programmed

### Communications

Port 1	RS232 full duplex or RS485 multi-drop optional or 20 mA current loop optional
Port 2	RS232 full duplex, no RTS on COMM 2
Protocols	Modbus™
Baud rates	15 - 58.3K bps
Custom transmit tables	4 user defined RS232 output tables
Input interpreter tables	15 user defined RS232 input tables

### Options & Accessories

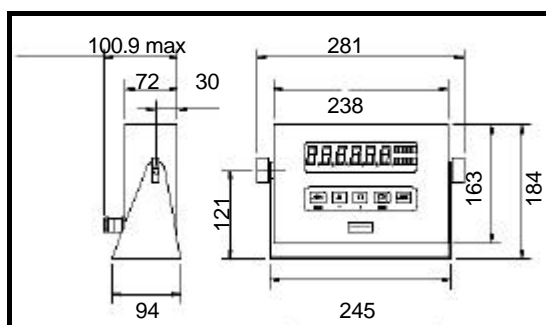
Note:	1 serial bus module <sup>(SBM)</sup> and 1 communication module <sup>(COM)</sup> mount internal to the enclosure allows for simultaneous monitoring of an additional signal input
Multi-scale module <sup>(SBM)</sup>	allows for simultaneous monitoring of an additional signal input
Analog output module <sup>(SBM)</sup>	isolated 16 bit signal output, 0-10 VDC, 0-20 mA or 4-20 mA, software adj. zero/gain (2 analog modules max) active only
I/O relay module <sup>(SBM)</sup>	8 variations of Quad I/O boards. (AC & DC - 4 output, 4 input or 2 in/2 out)
Output voltage rating	20 - 240 VAC @ 1 A 30 - 60 VAC @ 2 A
Input voltage rating	60 - 135 VAC 200 - 250 VAC 3 - 30 VDC
RS485 module <sup>(COM)</sup>	isolated serial communication module replaces RS232 on port 1, multi-drop with 251 devices max, half or full duplex up to 4000 feet, 56K bps max
20 mA current loop <sup>(COM)</sup>	isolated serial communication module replaces RS232 on port 1, TX active or passive, RX passive, 9600 bps max, 12 VDC, 1000 foot loop
Alpha keyboard	allows alpha character entry into data registers such as product name, part number, etc
Dura-shield	0.020" layer of weatherable film lexan with adhesive backing, applied to the front of the indicator, keeps display and keypad clean in extreme environments
Reflash software	download firmware enhancements via RS232 port
BDM flash software	download firmware enhancements via BDM port

### Enclosures & Displays

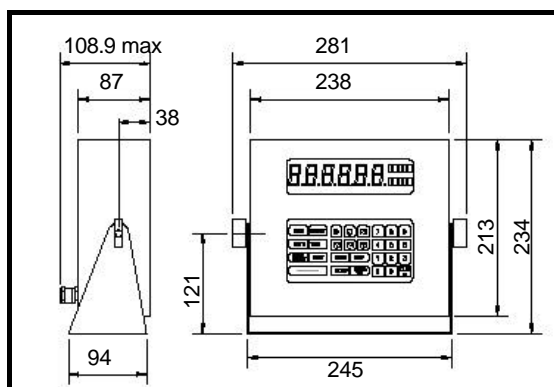
Enclosure	NEMA 4X (IP66), 304 stainless steel
Display	VFD, 6 digit 20 mm with 2 x 5 matrix

Nova Weigh's policy of constant product development dictates that we may alter specifications and or the appearance of our product range without notice.

## DIMENSIONS (mm)



460 digital weight indicator dimensions



465 digital weight indicator dimensions



# NOVA WEIGH



Visit us on the web [www.novaweigh.co.uk](http://www.novaweigh.co.uk)

BS EN ISO 9001:2000 Cert No: FM 11445

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