

# The 1700 Series Large Digital Displays



## Our Customers say .....

*" Now, we can easily see exactly what's happening in our manufacturing facility....the difference is fantastic. We no longer rush around the plant to peer at small local displays, and everyone has immediate access to the same information. Productivity is up, and the MD is happy. And, our Drivers can see their cargo weight clearly displayed at the weighbridge, no need to get out of the cab to read a small local display."*

- How is our production line performing?
- How many items have we produced?
- How do our line productivities compare?
- What 's the weight of the load being lifted?
- How long has this machine been running?
- What 's the humidity & temperature?

## The answer is simple!

**"Look at our 1700 display to find out!"**

and, there 's no need to run across the factory to view the information, you can see it from up to 110 metres away.



You can easily see important process variables such as temperature, speed, weight, total, humidity etc. up to 110 metres (330 feet) away! Keep yourself, and the workforce aware of important variables, and do it with one display and without moving away from your normal working area.

Sealed to IP65, these displays are complete functional units, with all the necessary signal conditioning, power supply and display circuitry to simplify installation. Just apply power (95-265 VAC or optionally 11-30 VDC) and connect your input signal to get precise readouts of your process variables. We also offer you versions for outdoor mounting.

Different fitting options mean you can wall-mount, suspend, pole or panel mount. For mounting outside, we have a special cover, which may be wall or pole mounted (75mm dia pole fixings provided).

**A digit size to suit every installation ...why pay too much for excessive digit height, and why struggle to see a small display ...no need !!**

Digit heights available....	25 mm	57 mm	102 mm	144 mm	200 mm	280 mm
Viewing distance....	10 metres	20 metres	40 metres	60 metres	80 metres	110 metres

Digit colours of Red, Green or Amber are available. NB Green digits are not well suited to bright ambient lighting areas. Daylight viewing displays are assembled using a matrix of ultrabright 5mm circular LED 's and have a 20 degree viewing angle .All 144, 200 and 280mm types use individual dot LEDs, but 57mm and 102mm normal brightness displays have solid segment digits.

\*White or Black Cases

\*Sealed to IP65 for 25, 57, 102 and 144mm versions

\*Sealed to IP54 for 200 and 280mm versions

\*Fully corrosion resistant enclosures

\*Heavy Industrial noise immunity confirmed by Marconi

\*All settings remotely adjustable via contact closures

\*Daylight Viewing brightness option for outside use



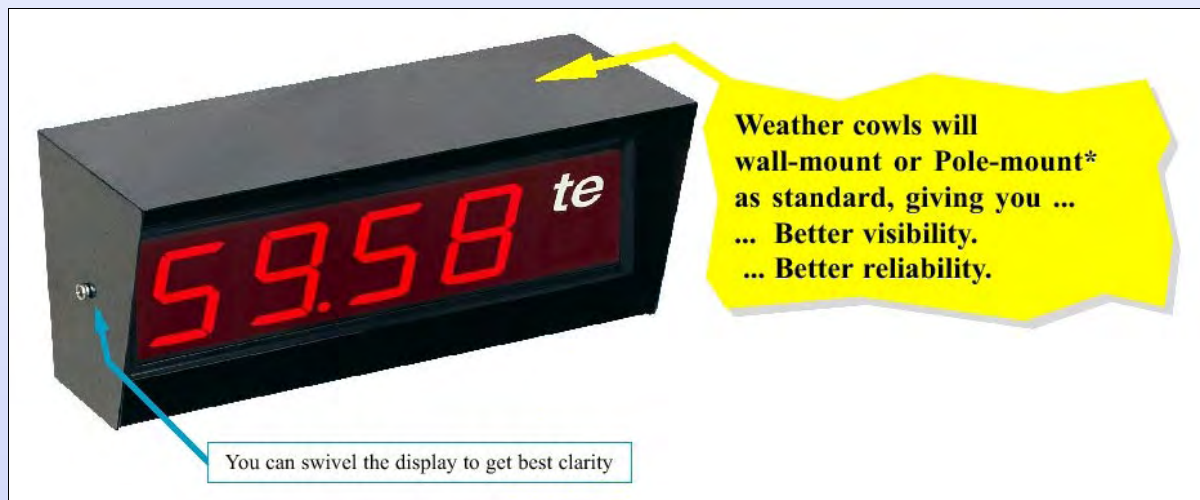
**\*\*Please also see our GRAND-INTUITIVE range for budget conscious applications \*\***

# The 1700 Series Large Digital Displays



## The 1700 Series functions and specifications.....

P175X	<b>Process</b>	4-20mA or 0-10V DC inputs as standard. Selectable filtering. Fully remotely scaleable. Up to 5 digits of display range 0-99999. Accuracy +/-0.02% of range. Resolution maximum 1 part in 19999. Last-digit roundup facility to count by 1,2,5 or 10. Excitation supply 12V at 65mA max. Remote contact closure auto-tare. RS422 ASCII data output port, or 2 alarm relays
L175X	<b>Load /Weight</b>	Direct loadcell connection. Remote scaling & autotare. Selectable filtering. Up to 5 digits of display range 0-99999. Accuracy +/-0.02% of range. Resolution maximum 1 part in 19999. Last-digit roundup facility to count by 1,2,5 or 10. Excitation supply 5V at 60mA max. Remote contact closure auto-tare. RS422 ASCII data output port, or 2 alarm relays
S17XX	<b>Serial Data</b>	Accepts RS232, RS485, RS422, 20mA TTY etc. Fully addressable. Wide protocol flexibility. Baud rates 300, 600, 1200, 2400, 4800, 9600. Format 8 data ,no parity ,1 or more stop bits. May be configured by the user to select certain parts only of a serial transmission for display. Profibus DP versions also available for displays with digit heights above 57mm.
R175X	<b>Rate /Frequency</b>	Accepts NPN, PNP, Contact Closure etc. Fully remotely scaleable. Averaging capability. Crystal controlled timebase. Sensor Excitation 12V at 65mA. RS422 ASCII output.
T17XX	<b>Totaliser</b>	Accepts NPN, PNP, Contact Closure etc .Up/Down or 2 count I/P 's. Fully remotely scaleable. Quadrature input model for bidirectional counting. Sensor Excitation 12V at 65mA. RS422 ASCII output
C17XX	<b>Clock</b>	Internal crystal controlled clock in HH:MM or HH:MM:SS format. Versions also accept serial data. Serial Data output ASCII RS422. (Optional Atomic timecode receiver, UK only)
E17XX	<b>Elapsed Time</b>	MM:SS,HH:MM or HH:MM:SS format. Please specify exact functional requirement on order. Serial Data output ASCII RS422.
TC175X	<b>Thermocouple</b>	Accepts type J,K,T,R,S Thermocouples. Degrees C or Degrees F notation on front lens. Serial Data output ASCII RS422 or 2 alarm relays
RTD175X	<b>RTD</b>	Accepts PT100 3 wire sensors. Degrees C or Degrees F notation on front lens. Serial Data output ASCII RS422 or 2 alarm relays
B175X	<b>BCD Data</b>	5 or 7 digit capacity. 5V, 12V or 24V logic. New! Use PSC1 +S17XX to minimise wiring costs.



We suggest you use our weather cowls for all large displays mounted outside.

Weather Cowls protect the displays from sun, rain and snow, and may be either wall mounted or pole mounted. Our cases are certified to IP65, but certain conditions may cause moisture ingress -for example a downpour of rain on a hot day can suddenly cool an unprotected enclosure. Internal case pressure drops and may suck in moist air.

### A weather cowl will greatly reduce this effect

Please ask our sales office for full mechanical details (matt black finished aluminium)

\*Includes two pole-clamps as standard. Pole is not supplied. Designed for 76 mm /3 " O.D.poles.

# The 1700 Series Large Digital Displays



Here is a typical example of a Custom Fabricated large display.

This specially designed system gives collection and loading information to truck drivers, and has two of our S1756 daylight viewing displays, visible up to 60 metres away.

The displays simply show data values coming from an RS422 data link, and the data is generated by a central PLC.

If you need a special display, feel free to call us with details and we will prepare a detailed no-obligation quotation for you.

**Stop Press:** A new daylight brightness option will soon be released -suffix 'UDLV'. More than double the viewing angle of existing DLV devices, with dramatic improvement of visibility in sunlight. **Ask for details.**

## General Specifications:

Case Material :uPVC, welded .

Gasket Material: Neoprene

Sealing screws: Stainless Steel

## Display technology =LED

Brightness/viewing angle (typical, red)

Standard (mcd/deg)

DLV (daylight viewing) (mcd/deg)

25 mm

t.b.a.

t.b.a.

57 mm

8/170

1000/19

102 mm

60/170

1000/19

144 mm

300/41

1000/19

200 mm

300/41

1000/19

280 mm

300/41

1000/19

Case dimensions: Case depth 90 mm excluding cables

Digit Height 5 digit mm (Kg) 7

25 mm

57 mm

102 mm

144 mm

200 mm

280 mm

to be advised

288x120 (2.5)

480x168 (4.5)

624x192 (5.5)

824x248 (7.0)

1172x336( 12.0)

digit mm (Kg)

to be advised

384x120 (3.0)

672x168 (5.0)

864x192 (6.0)

1140x248 (8.0)

1606x336( 13.5)

Panel Cutout dimensions:

5 digit mm

to be advised

279x111

471x159

615x183

815x239

1163x327

7 digit mm

to be advised

375x111

663x159

855x183

1131x239

1597x327

## Power supply

:95-265VAC Std., 11-30VDC optional

## Power consumption

:20 watts maximum

## Alarm option

:2 alarms SPST rated 2A 250 VAC. Selectable HI or LO. Display flashes in alarm state

## Mounting methods

:Wall, panel or suspension, mounting kit included in price, specify when ordering

## Operating temperature

:-10 to +50 degrees C

## Storage temperature

:-40 to +60 degrees C

## Humidity

:25-144 mm types 100%(IP65)200-280 mm types 0-60% non condensing (IP54)

Function	Series	No. of Digits	Digit Height	Case Colour	Mounting	Brightness	Output Options
Process Inputs	= 'P' '17'	Function P,R,RTD,TC,L are fixed 5 digit displays.	25mm = '1'	Black = 'B'	Panel = '1'	Normal = 'N'	RS422 = '0'
Serial Input	= 'S'		57mm = '2'	White = 'W'	Wall = '2'	Daylight = 'DLV'	Alarms = 'AL2'
Totaliser	= 'T'		102mm = '4'		Hanging = '3' (DLV not available)		
Ratometer	= 'R'		144mm = '6'		Cowl = '4'	on 25mm displays)	
PT100	= 'RTD'	Function S and T may be 5 or 7 digits.	200mm = '8'				
Thermocouple	= 'TC'		280mm = '11'				
Load/Weight	= 'L'	Function C or E may be 4 or 6 digits.					
Clock	= 'C'						
Elapsed Timer	= 'E'						

Example P1752-B-2-DLV-0 =Process display with 5 x 57 mm high digits, black case, wall mounting, daylight viewing brightness, RS422 output. A remote programmer sealed to IP65 is available, part number 1700RP. This comprises of 3 sealed pushbuttons in a wall mounting enclosure, so is not essential, but advisable if you wish to reconfigure your displays in a harsh environment. Add suffix DCPSU for DC powered displays. Add suffix 'Green' or 'Amber' if you wish digit colours other than red.