

## FUSION-S4

*Serial Input Large Digit Display*



### KEY FEATURES

- 4 or 6 digits
- 5 digit colours available
- Indoor or outdoor brightness
- RS422 / RS485 input
- IP65 sealed
- Viewing distances up to 600m (1,968 feet)
- AC or DC powered
- Wall, suspension or panel mounting
- Alarm output, analogue output and data output options

### DESCRIPTION

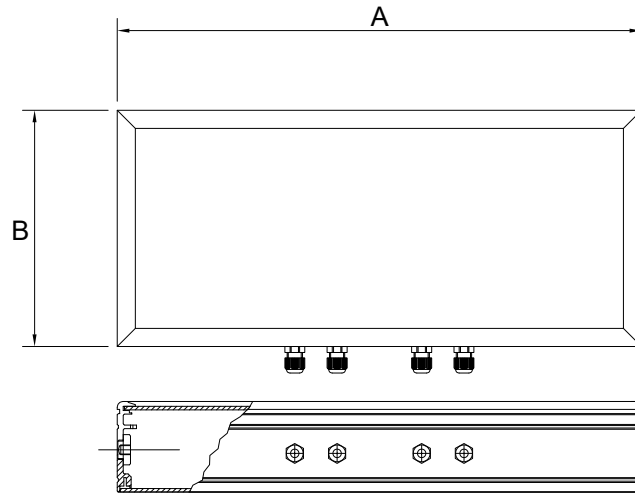
FUSION large digit displays are primarily used for displaying numerical information which is visible from a distance. In addition, the displays have several analogue, alarm and data output options which can work with systems already in situ to control processes within the system.

The FUSION-S4 is available as 4 or 6 digits and accepts an RS422 / RS485 data signal. The displays are easily configurable for simple data strings or for more complex data strings with specific data extracted and shown.

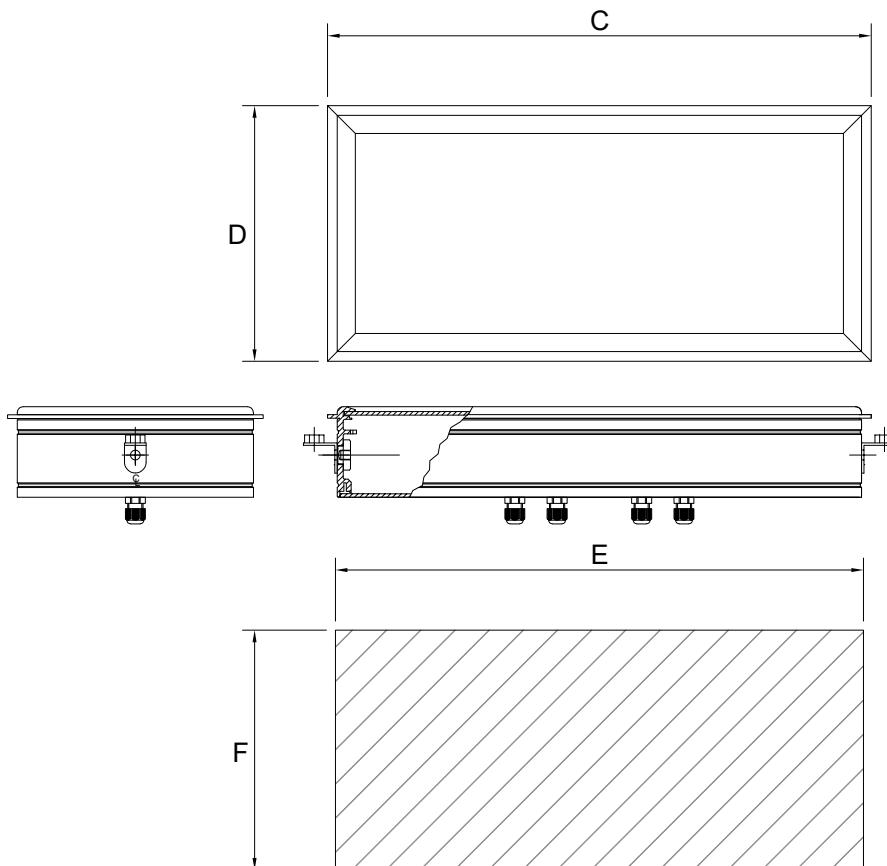


## DIMENSIONAL DRAWINGS

### Wall or Suspension Mounting



### Panel Mounting



**Notes:**

- i. Refer to dimensions on next page
- ii. Enclosure depth is 75mm
- iii. Allow at least 100mm behind the panel for panel mounting displays

## DIMENSIONS and WEIGHTS (mm) (kg)

		Wall or Suspension Mounting		Panel Mounting Bezel		Panel Mounting Cutout		
Model	Digit Format	Width (A)	Height (B)	Width (C)	Height (D)	Width (E)	Height (F)	Weight
<b>F2-4N FB</b>	2" 4 digit	279.5	154.5	297.5	172.5	282.5	157.5	2
<b>F2-4N UM FB</b>	2" 4 digit UM option	376	154.5	394	172.5	379	157.5	2.5
<b>F2-6N FB</b>	2" 6 digit	376	154.5	394	172.5	379	157.5	3
<b>F2-6N UM FB</b>	2" 6 digit UM option	504	154.5	522	172.5	507	157.5	3.5
<b>F4-4N FB</b>	4" 4 digit	434	195.5	452	213.5	437	198.5	3
<b>F4-4N UM FB</b>	4" 4 digit UM option	616	195.5	634	213.5	619	198.5	3.5
<b>F4-6N FB</b>	4" 6 digit	616	195.5	634	213.5	619	198.5	4.5
<b>F4-6N UM FB</b>	4" 6 digit UM option	824	195.5	842	213.5	827	198.5	5
<b>F6-4</b>	6" 4 digit	580	246	598	264	583	249	4
<b>F6-4 UM</b>	6" 4 digit UM	820	246	840	264	823	249	5
<b>F6-6</b>	6" 6 digit	820	246	838	264	823	249	6
<b>F6-6 UM</b>	6" 6 digit UM	1060	246	1080	264	1063	249	7
<b>F8-4</b>	8" 4 digit	750	290	768	308	753	293	6
<b>F8-4 UM</b>	8" 4 digit UM	1072	290	1092	308	1075	293	7
<b>F8-6</b>	8" 6 digit	1072	290	1090	308	1075	293	8
<b>F8-6 UM</b>	8" 6 digit UM	1395	290	1274	308	1257	293	9
<b>F12-4</b>	12" 4 digit	1058	408	1068	426	1053	411	8
<b>F12-4 UM</b>	12" 4 digit UM	1535	408	1560	426	1543	411	10
<b>F12-6</b>	12" 6 digit	1535	408	1558	426	1543	411	12
<b>F12-6 UM</b>	12" 6 digit UM	1722	408	1742	426	1725	411	14
<b>F16-4</b>	16" 4 digit	1368	515	1386	533	1371	518	12
<b>F16-4 UM</b>	16" 4 digit UM	2020	515	2040	533	2023	518	14
<b>F16-6</b>	16" 6 digit	2020	515	2038	533	2023	518	16
<b>F16-6 UM</b>	16" 6 digit UM	2202	515	2222	533	2205	518	18
<b>F24-4</b>	24" 4 digit	1975	750	-	-	-	-	20
<b>F24-4 UM</b>	24" 4 digit UM	2963	750	-	-	-	-	22
<b>F24-6</b>	24" 6 digit	2963	750	-	-	-	-	22
<b>F24-6 UM</b>	24" 6 digit UM	3950	750	-	-	-	-	23
<b>F32-4</b>	32" 4 digit	2556	946	-	-	-	-	24
<b>F32-4 UM</b>	32" digit UM	3834	946	-	-	-	-	28
<b>F32-6</b>	32" 6 digit	3834	946	-	-	-	-	36
<b>F32-6 UM</b>	32" 6 digit UM	5112	946	-	-	-	-	40
<b>F48-4</b>	48" 4 digit	3436	1300	-	-	-	-	32
<b>F48-4 UM</b>	48" 4 digit UM	5154	1300	-	-	-	-	38
<b>F48-6</b>	48" 6 digit	5154	1300	-	-	-	-	48
<b>F48-6 UM</b>	48" 6 digit UM	6872	1300	-	-	-	-	54

**Notes:**

- i. 2" 4 digit displays with any output options fitted require a wider enclosure (UM option)
- ii. 2" 4 digit and 4" 4 digit displays with any HEATER options fitted require a wider enclosure (UM option)
- iii. All displays with 48V AC power option require a wider enclosure (UM option)
- iv. E & OE

## TECHNICAL DATA

<b>Digit Height (inches)</b>	2.2 (F2)	4.0 (F4)	5.9 (F6)	7.9 (F8)	11.8 (F12)	15.7 (F16)	23.6 (F24)	31.5 (F32)	47.2 (F48)
<b>Digit Height (millimeters)</b>	57	102	150	200	300	400	600	800	1200
<b>Viewing Distance (feet)</b>	82	180	262	360	508	672	1,000	1,328	1,968
<b>Viewing Distance (metres)</b>	25	55	80	110	155	205	305	405	600
<b>Number of Digits</b>	4 or 6								
<b>Digit Format</b>	8.8.8.8. or 8.8.8.8.8.8.								
<b>Input Signal</b>	RS422 / RS485								
<b>Digit Colour</b>	Blue, green, red, white or yellow								
<b>Brightness</b>	Indoor or outdoor with 7 levels of adjustment								
<b>Power Supply</b>	95-265V AC (standard), 11-30V DC (optional), 48V AC (optional)								
<b>Power Burden</b>	40VA maximum								
<b>Mounting</b>	Brackets supplied for wall, suspension or panel mounting								
<b>Front Panel Controls</b>	Up to 200mm high digits, above 200mm high digits requires an optional wired or wireless controller								
<b>Logic Inputs</b>	3 x NPN or contact closure for START, STOP and RESET when used in timing mode								
<b>Environmental</b>									
<b>Enclosure Material</b>	Heavy duty welded uPVC								
<b>Lens Material</b>	Acrylic								
<b>Sealing</b>	IP65								
<b>Storage Temperature</b>	-20°C to +70°C, non-condensing								
<b>Operating Temperature</b>	0°C to +50°C, non-condensing								
<b>Extended Operating Temperature</b>	-25°C to +50°C, non-condensing (with optional heater fitted inside display)								
<b>Connectors</b>	Internal detachable screw terminal connectors accessed via compression glands								
<b>Analogue Output (optional)</b>									
<b>ANB Option</b>	-10 to +10V into loads >1k Ohms, resolution 0.4mV								
<b>ANI Option</b>	0-20mA or 4-20mA into loads <500 Ohms, resolution 0.4uA								
<b>ANV Option</b>	0-10V into loads >1k Ohms, resolution 0.2mV								
<b>Scaling</b>	Fully adjustable, direct or inverse. Can be derived from GROSS or NETT value								
<b>Response Speed</b>	Derived from displayed value, updated x10 per second, display filtering applies to analogue output								
<b>Linearisation</b>	Derived from displayed value								
<b>Isolation</b>	250V AC optically isolated from input, logic, excitation, power, alarms and data output ports								
<b>Accuracy</b>	+/- 0.1% of range								
<b>Linearity</b>	+/- 0.02% of range								
<b>Stability</b>	+/- 50ppm/°C								
<b>Alarm Outputs (optional)</b>									
<b>AL2 and AL4 Option</b>	2 or 4 x SPST mechanical relays, 2A @ 250V AC, resistive load								
<b>DSS and QSS Option</b>	2 or 4 x solid state relays, specify AC or DC, 100mA max @ 250V AC, 500mA max @ 60V DC								
<b>SPCO Option</b>	2 x SPCO mechanical relays, 2A @ 250V AC, resistive load								
<b>Response Speed</b>	For mechanical relays allow 105mS, for solid state relays allow 100mS								
<b>Data Output (optional)</b>									
<b>232 Option</b>	RS232 ASCII								
<b>485 Option</b>	RS422/RS485 ASCII + Modbus ASCII								
<b>RTU Option</b>	Modbus RTU								
<b>Response Speed</b>	Derived from displayed value, updated x10 per second, display filtering applies to data output								
<b>Isolation</b>	250V AC optically isolated from input, logic, excitation, power, alarms and analogue output ports								

## ORDERING GUIDE

<b>Digit Height:</b>		<b>X</b>	<b>- X</b>	<b>- S4</b>	<b>- X</b>	<b>- X</b>	<b>- X</b>	<b>- X</b>	<b>- X</b>	<b>- X</b>
<b>F2</b> 2 inches (57mm)	<b>F4</b> 4 inches (102mm)									
<b>F6</b> 6 inches (150mm)	<b>F8</b> 8 inches (200mm)									
<b>F12</b> 12 inches (300mm)	<b>F16</b> 16 inches (400mm)									
<b>F24</b> 24 inches (600mm)	<b>F32</b> 32 inches (800mm)									
<b>F48</b> 48 inches (1200mm)										
<b>Digit Format:</b>										
<b>4N</b> 8.8.8.8 - 4 digit, numeric format										
<b>6N</b> 8.8.8.8.8.8 - 6 digit, numeric format										
<b>Function / Input Type:</b>										
<b>S4</b> RS422 / RS485 input										
<b>Analogue Output:</b>										
<b>0</b> None	<b>ANB</b> -10 to +10V	<b>ANI</b> 4-20mA	<b>ANV</b> 0-10V							
<b>Alarm Outputs:</b>										
<b>0</b> None	<b>AL2</b> 2 x SPST mechanical relays	<b>AL4</b> 4 x SPST mechanical relays								
<b>DSS</b> 2 x solid state relays (specify AC or DC)	<b>QSS</b> 4 x solid state relays (specify AC or DC)									
<b>SPCO</b> 2 x SPCO mechanical relays										
<b>Data Output:</b>										
<b>0</b> None	<b>232</b> RS232	<b>485</b> RS422/485 + Modbus ASCII	<b>RTU</b> Modbus RTU							
<b>Digit Colour:</b>										
<b>Indoor</b>		<b>Outdoor</b>								
<b>B</b> Blue 6" and above	<b>BDLV</b> Blue 6" and above									
<b>G</b> Green	<b>GDLV</b> Green									
<b>R</b> Red	<b>RDLV</b> Red									
<b>W</b> White 6" and above	<b>WDLV</b> White 6" and above									
<b>Y</b> Yellow	<b>YDLV</b> Yellow									
<b>Power:</b>										
<b>48VAC</b> 48V AC	<b>AC</b> 95-265V AC	<b>DC</b> 11-30V DC								
<b>Mounting:</b>										
<b>Wall</b>		<b>Suspension</b>		<b>Panel</b>						
<b>2</b> Cable glands on bottom	<b>3</b> Cable glands on bottom	<b>1</b> Cable glands on rear								
<b>2L</b> Larger brackets, cable glands on bottom	<b>3BB</b> Back to back, cable glands on bottom									
<b>2SS</b> 316 SS brackets, cable glands on bottom	<b>3SS</b> 316 Stainless steel brackets, glands on bottom									
<b>4</b> Cable glands on top	<b>5</b> Cable glands on top									
<b>4L</b> Large brackets, cable glands on top	<b>5BB</b> Back to back cable glands on top									
<b>10</b> Cable glands on rear	<b>6</b> Cable glands on rear									
<b>7</b> Cable glands on bottom (includes wall and suspension brackets)										
<b>8</b> Cable glands on top (includes wall and suspension brackets)										

