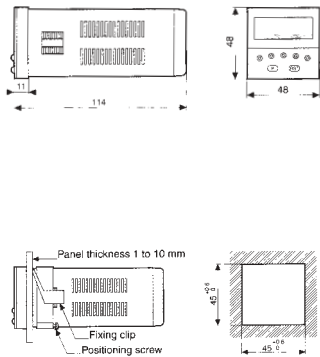


Single & Dual Preset Counters 48 x 48



Single and dual preset counters with high resolution back-lit LCD or bright red illuminated displays which show count and preselection values simultaneously in 5 digits. Front panel mounted with protection to IP54 and housed in a 48 x 48mm case. Relay outputs with 1 changeover or 2 normally open contacts. Configuration settings and current count value saved in EEPROM memory in the event of loss of power. Unit also provides an output of 12VDC to 100mA max. suitable for powering external components. Suitable for panels of between 1mm & 10mm thickness.

- Counter** - displays total number of counts received and can provide relay output upon reaching a preset value.
- Batch counter** - provides relay output upon reaching a preset batch quantity.
- Tachometer** - displays frequency and can provide relay output at a preset frequency.
- Chronometer** - measures time between the rising edges of inputs.

Display	-9,999 to +99,999
Inputs	1 or 2 counting inputs and reset input
Inputs low level	0 to 1VDC
Inputs high level	4 to 30VDC
Impedance	10k ohm
Input speeds	Up to 7.5kHz dependant on model
Input reset	From front panel or electrically remote
Relay outputs	1 changeover or 2 normally open
Relay output rating	2A at 250VAC
Aux. output supply	12VDC / 100mA max.
Power consumption	4W dc version, 10VA ac version
Insulation	2.5kV
Electrical life	10 ⁵ at 2A
Temperature	0° to +55°C
Connections	Screw terminals
Panel cut-out	45 x 45mm
Depth behind panel	103mm

Counting Modes

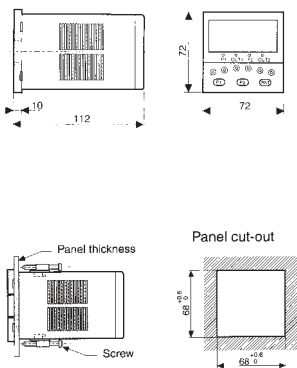
- UP** - counts the number of pulses received at input 1.
- DOWN** - counts down from a preset value, the number of pulses received at input 1.
- IND** - counts the number of pulses at input 1 minus the number of pulses at input 2.
- CUMUL** - counts the number of pulses at input 1 plus the number of pulses at input 2.
- DIR** - counts the number of pulses at input 1, however if input 2 goes high then the count is reversed.
- PH** - counts the number of pulses on input 1, if the pulses on input 2 shift in phase by 90° compared with input 1 then the count is reversed. This is used to interface to incremental encoders to provide position indication.
- PH2** - counts the number of both rising and falling edges on input 1 and reverses the count if the pulse on input 2 is in advance of the pulse on input 1.
- PH4** - counts the number of both rising and falling edges on input 1 and on input 2, e.g. 1 pulse on each = count of 4.

Stock No.	Manf Ref ¹	Type	Display	Voltage	Presets	Outputs	Counting Modes	Unit Price		
								1-4	5-9	10+
3261803	87 618 048	4141	BACK-LIT LCD	80-260VAC	1	1	UP, DN, PH	115.89	108.94	103.14
3261872	87 618 228	4192	BACK-LIT LCD	80-260VAC	2	2	UP, DN, IND, CUMUL, DIR, PH, PH2, PH4	137.33	129.09	122.22
3261866	87 618 222	4192	BACK-LIT LCD	10-30VDC	2	2	UP, DN, IND, CUMUL, DIR, PH, PH2, PH4	137.33	129.09	122.22
3261845	87 618 148	4341	RED LED	80-260VAC	1	1	UP, DN, PH	134.05	126.01	119.30
3261890	87 618 328	4392	RED LED	80-260VAC	2	2	UP, DN, IND, CUMUL, DIR, PH, PH2, PH4	145.66	136.92	129.64

Dual Preset Counter 72 x 72



LCD Model Shown



Dual preset counters with bright red illuminated displays which show count and preselection values simultaneously in 6 digits. Front panel mounted with protection to IP54 and housed in a 72 x 72mm case. Outputs are 2 changeover relays and 2 NPN transistors. Configuration settings and current count value saved in EEPROM memory in the event of loss of power. Unit also provides an output of 12VDC at 100mA suitable for powering external components. Suitable for panels of between 1mm & 10mm thickness.

Functions:

- Counter** - displays total number of counts received and can provide relay output upon reaching a preset value.
- Batch counter** - e.g. counts number of bottles on packing line into packs of 6 then dispatches into box containing batch of 4 packs
P2-current counter preset value : 00006
P1-batch counter preset value : 00004
- Totaliser** - displays the number of counts received with no switching.
- Tachometer** - displays frequency and can provide relay output at a preset frequency.
- Chronometer** - measures time between the rising edges of inputs.

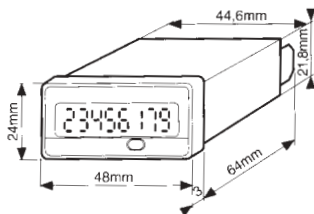
Display	-99,999 to +999,999
Inputs	1 or 2 counting, 1 inhibit, 1reset
Input low level	0 to 1VDC
Input high level	4 to 30VDC
Impedance	10K ohm
Input speeds	Up to 9kHz dependant on function and mode
Input reset	From front panel or electrically remote
Outputs	1 changeover relay and 2 NPN transistors
Relay output rating	2A at 250VAC
NPN output rating	100mA max. / 40VDC max.
Aux. output supply	12VDC at 100mA
Power consumption	< 5W dc version, < 13VA ac version
Insulation	2.5kV
Electrical life	10 ⁵ at 2A
Temperature	0° to +55°C
Connections	Screw terminals
Panel cut-out	68 x 68mm
Depth behind panel	102mm

Counting Modes

- UP** - counts the number of pulses received at input 1.
- DOWN** - counts down from a preset value, the number of pulses received at input 1.
- IND** - counts the number of pulses at input 1 minus the number of pulses at input 2.
- CUMUL** - counts the number of pulses at input 1 plus the number of pulses at input 2.
- DIR** - counts the number of pulses at input 1, however if input 2 goes high then the count is reversed.
- PH** - counts the number of pulses on input 1, if the pulses on input 2 shift in phase by 90° compared with input 1 then the count is reversed. This is used to interface to incremental encoders to provide position indication.
- PH2** - counts the number of both rising and falling edges on input 1 and reverses the count if the pulse on input 2 is in advance of the pulse on input 1.
- PH4** - counts the number of both rising and falling edges on input 1 and on input 2, e.g. 1 pulse on each = count of 4.

Stock No.	Manf Ref ¹	Type	Display	Voltage	Presets	Outputs	Counting Modes	Unit Price		
								1-4	5-9	10+
3261953	87 619 328	7392	RED LED	80-260VAC	2	2 + 2	UP, DN, IND, CUMUL, DIR, PH, PH2, PH4	208.28	195.78	185.37
3261947	87 619 322	7392	RED LED	10-30VDC	2	2 + 2	UP, DN, IND, CUMUL, DIR, PH, PH2, PH4	208.28	195.78	185.37

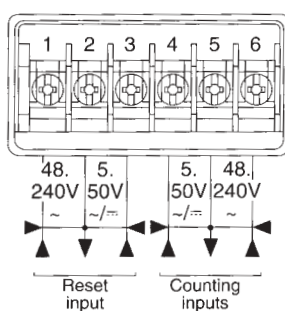
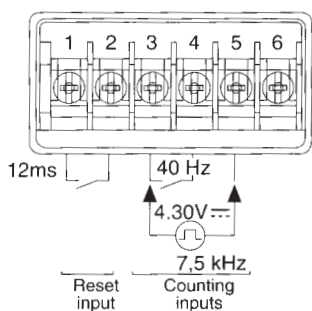
**Totalisers, LCD Display
24 x 48**



Totalisers with high resolution LCD displays offering a counting capacity of 0-99,999,999 in 7mm high digits. Triggered by either voltage input or switch contact. Front panel mounted with protection to IP66 and housed in a 24 x 48mm case. Front panel reset with inhibit facility and remote reset. Powered by lithium battery giving 8 year life. Suitable for panels of between 1mm & 10mm thickness. Also available are various bezels and adaptors to compliment panel mounting, please consult sales.

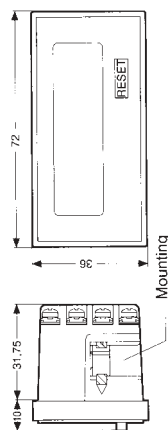
- Display: 8 digit LCD, 7mm high
- Counting capacity: 0 - 99,999,999
- Slow count input (2231): 40 Hz, by volt-free contact or open collector NPN transistor (terms 3-4)
- Fast count input (2231): 7.5 kHz, 4-30VDC (terms 3-5)
- Counting input (2232): 2 voltage levels, 5-50VAC/VDC (terms 4-5) 48-240VAC (terms 5-6)
- Front panel reset: Switch No2 to OFF - Inhibited
Switch No2 to ON -Allowed
- Reset input (2231): By volt-free contact or open collector NPN transistor (terms 1-2)
- Reset input (2232): 2 voltage levels, 5-50VAC/VDC (terms 2-3) 48-240VAC (terms 1-2)
- Supply: Lithium battery (can be switched off by dip switch underneath the unit)
- Temperature: -10° to +55°C
- Front panel protection: IP66
- Housing material: Self extinguishing ABS
- Connections: Screw terminals
- Panel cut-out: 22 x 44.8mm
- Depth behind panel: 64mm

Terminal identification



Stock No.	Manf Ref'	Type	Display	Counting Inputs	Unit Price		
					1-4	5-9	10+
3261770	87 610 040	2231	LCD	SWITCH/TRANSISTOR	37.97	35.69	33.79
3261773	87 610 050	2232	LCD	VOLTAGE	44.87	42.18	39.93

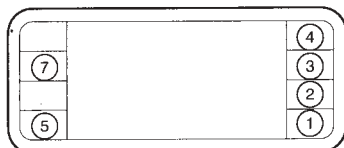
**Totaliser, LCD Display
36 x 72**



Totaliser with high resolution LCD display offering a counting capacity of 0-99,999,999 in 10mm high digits. Triggered by either voltage input or switch contact. Front panel mounted with protection to IP56 and housed in a 36 x 72mm case. Front panel reset and remote reset. Powered by lithium battery giving 8 year life. Suitable for panels of between 1mm & 10mm thickness.

- Display: 8 digit LCD, 7mm high
- Counting capacity: 0 - 99,999,999
- Slow speed count input: for contact closure or open collector NPN transistor (terms 1-2)
- Max. frequency: 40 Hz
- Contact closed time min.: 12 ms
- Contact open time min.: 12 ms
- High speed count input: From voltage level
- Max. frequency: 5 kHz
- High level: 3 - 30 VDC
- Low level: 0 - 0.7 VDC
- Minimum pulse time: 70 µs
- Front panel reset: By push button if terminals 1-5 are connected together
- Reset input: By volt-free contact or open collector NPN transistor (terms 1-4)
- Supply: Lithium battery giving 8 years life
- Temperature: 0° to +55°C
- Front panel protection: IP56
- Housing material: Self extinguishing (UL94VO)
- Connections: Screw terminals
- Panel cut-out: 33 x 68mm
- Depth behind panel: 31.75mm

Terminal identification

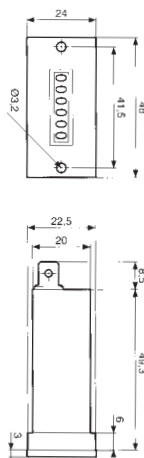


Type 3233

- 1 - Common 0 V
- 2 - Slow counting input
- 3 - High-speed counting input
- 4 - Remote reset
- 5 - Enable/disable front reset button

Stock No.	Manf Ref'	Type	Display	Counting Inputs	Unit Price		
					1-4	5-9	10+
3261794	87 614 040	3233	LCD	SWITCH TRANSISTOR/VOLTAGE	85.76	80.61	76.33

Totalisers without Reset, 6 Digits, 24 x 48

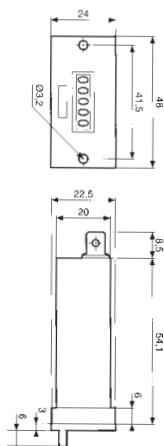


A non-re-settable electro-mechanical totalising counter with 6 digit display offering a counting capacity of 0-999,999. Front panel mounted housed in a 24 x 48mm case. Suitable for panels of between 1mm & 10mm in thickness.

- Display 6 digit white on black, 4mm high
- Min. count rate 18 imp/s (VAC), 25 imp/s (VDC)
- Min. pulse time 28ms (VAC), 20ms (VDC)
- Pulse/pause ratio 1:1
- Voltage variation +10% to -15% from Un
- Power consumption 0.8W dc, 2.1VA ac
- IP Rating IP40
- Temperature -10° to +60°C
- Connections 6.3mm push-on connectors
- Panel cut-out 23 x 37mm
- Depth behind panel 51.8mm

Stock No.	Manf Ref'	Type	Unit Price		
			1-4	5-9	10+
3262466	99 766 901	230VAC	24.93	23.68	22.44
3262478	99 766 907	24VDC	18.08	17.18	16.27

Totaliser with Reset, 5 Digits, 24 x 48



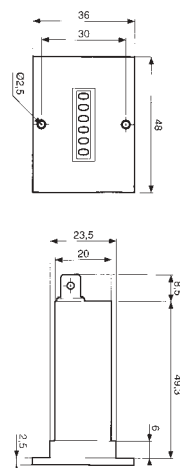
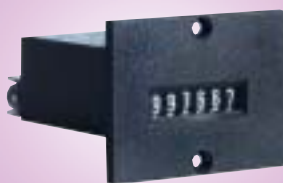
An electro-mechanical totalising counter with a manual reset 5 digit display offering a counting capacity of 0-99,999. Front panel mounted housed in a 24 x 48mm case. Suitable for panels between 1mm & 10mm in thickness.

- Display 6 digit white on black, 4mm high
- Min. count rate 18 imp/s (VAC), 25 imp/s (VDC)
- Min. pulse time 28ms (VAC), 20ms (VDC)
- Pulse/pause ratio 1:1
- Voltage variation +10% to -15% from Un
- Power consumption 0.8W dc, 2.1VA ac
- IP Rating IP40
- Temperature -10° to +60°C
- Connections 6.3mm push-on connectors
- Panel cut-out 23 x 37mm
- Depth behind panel 51.8mm

Note:No count pulse must be received during the zero reset time. If a pulse is received damage may be caused.

Stock No.	Manf Ref'	Type	Unit Price		
			1-4	5-9	10+
3262481	99 766 921	230VAC	28.96	27.51	26.06
3262490	99 766 927	24VDC	23.38	22.21	21.04

Totalisers without Reset, 6 Digits, 36 x 48

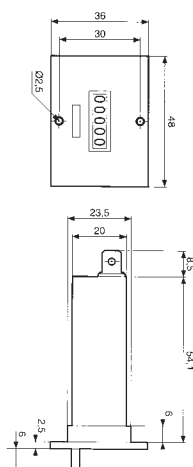


A non-re-settable electro-mechanical totalising counter with 6 digit display offering a counting capacity of 0-999,999. Front panel mounted housed in a 36 x 48mm case. Suitable for panels of between 1mm & 10mm in thickness.

- Display 6 digit white on black, 4mm high
- Min. count rate 18 imp/s (VAC), 25 imp/s (VDC)
- Min. pulse time 28ms (VAC), 20ms (VDC)
- Pulse/pause ratio 1:1
- Voltage variation +10% to -15% from Un
- Power consumption 0.8W dc, 2.1VA ac
- IP Rating IP40
- Temperature -10° to +60°C
- Connections 6.3mm push-on connectors
- Panel cut-out 24 x 44mm
- Depth behind panel 51.8mm

Stock No.	Manf Ref'	Type	Unit Price		
			1-4	5-9	10+
3262436	99 766 701	230VAC	30.99	29.44	27.89

Totalisers with Reset, 5 Digits, 36 x 48



An electro-mechanical totalising counter with a manual reset 5 digit display offering a counting capacity of 0-99,999. Front panel mounted housed in a 36 x 48mm case. Suitable for panels between 1mm & 10mm in thickness.

- Display 6 digit white on black, 4mm high
- Min. count rate 18 imp/s (VAC), 25 imp/s (VDC)
- Min. pulse time 28ms (VAC), 20ms (VDC)
- Pulse/pause ratio 1:1
- Voltage variation +10% to -15% from Un
- Power consumption 0.8W dc, 2.1VA ac
- IP Rating IP40
- Temperature -10° to +60°C
- Connections 6.3mm push-on connectors
- Panel cut-out 23 x 37mm
- Depth behind panel 56.6mm

Note:No count pulse must be received during the zero reset time. If a pulse is received damage may be caused.

Stock No.	Manf Ref'	Type	Unit Price		
			1-4	5-9	10+
3262451	99 766 710	230VAC	40.85	38.81	36.77