

## CT220 Counter

CT220 counters would typically be used in a vehicle counting application, where it is required to count the number of vehicles entering and exiting an enclosed area, such as a parking garage. CT220 counters are available in a variety of models in both panel mount and boxed versions for ease of integration into almost any Parking Management system. The visual output is achieved with a four digit, seven segment display which clearly indicates current modes of operation and total counts and the active memory system ensures that the last count is stored during power failures of up to an hour or longer, automatically restoring the count on power–up again.

#### **APPLICATIONS**

- Parking garage total capacity counting
- Parking garage floor space counting
- Vehicle counting
- Industrial counting

#### **FEATURES**

- Compact Size:
- · Large Display:
- User Friendly Programming:
- Input Protection:
- Large Count Capacity:
- Power Fail Memory:
- Manual Override:

Serial Comns:

Microprocessor and SMD technologies have combined to allow a reduction in size of the CT220 to allow the counters to be incorporated into all installations.

The counters have a large four digit LED display allowing easy visibility of displayed parameters.

All programming is executed on two multi–function pushbuttons and visual feedback is provided on the display making the counter easy to operate.

The two Up and Down count inputs are isolated, buffered and filtered to prevent false counts caused by induced voltages on long input lines. The four digit display provides for a total count capacity of 9999, sufficient for all car park applications. Retention of displayed data is guaranteed for a 1 hour period following a

power failure. Typically this data is retained for a period of between 3 and 5 hours.

Provides the option to manually override the output relay. In the "Auto" mode the relay will change state at the transition between count values of 0001 and 0000 and remain in this state until a count of 0001 is achieved. Panel mount counter available with RS232 + RS485 comns for integration into visual counting systems.

### Counting System Using The CT220P & Multiplexer with VMS





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## CT220 Technical Data

Input Protection:	Optical Isolation. Isolation Voltage: 2500 Vrms.	
Spike Filter: Input Actuation: Display:	On all inputs. Protects against induced voltages. By contact closure (minimum 50 ms). Four digit, seven segment LED Character height = 10mm Maximum count = 9999	
Output Relay: Controls:	<ol> <li>Rating: 5 A @ 230V AC Change–over contact Auto or Manual modes possible.</li> <li>Panel Version RS232 or RS485 serial comns.</li> <li>Two multi–function pushbuttons UP (MODE) key for unit up count and secondary mode functions. DOWN (SET) for unit down count and secondary</li> </ol>	
Restore: Reset: Memory:	set functions Retrieves stored value. Resets unit to 0001. Retains data prior to a power failure Duration: 1 Hour (minimum)	
Power Requirements: Operating Temp Range: Material:	120V AC ±15% 48–60Hz (CT221) 230V AC ±15% 48–60Hz (CT222) 12–24V AC/DC (CT224) Requirements – 1.5VA max @ 230V -40°C to +65°C High heat ABS blend	
Dimensions: Mounting: Connector:	76 mm (high) 40 mm (wide) x 78 mm (deep) Shelf or DIN–rail socket Single rear mount 11–pin submagnal (86CPII) Option – 1 metre flying lead	

# CT220 Boxed Counter – Typical Wiring Configuration

PIN	FUNCTION		
1	LIVE	110V - CT221 - 220V - BD222 - 12/24V - CT224	
2	NEUTRAL	110V = CT221 : 230V = PD222 : 12/24V = CT224	
3	ADD IN I		
4	ADD IN 2		
5	OUTPUT RELAY N/O		
6	OUTPUT RELAY COMMON		
7	SUBTRACT INPUT I		
8	SUBTRACT INPUT 2		
9	COMMON		
10	OUTPUT RELAY N/C		
н	NOT USED		

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