

## Digital display timer TMC5S

### Technical Manual

Version number: EN-V1-03



#### About us

##### Guangzhou Tmcon Electronic Technology Co, Ltd.

Address: No.1, Xinhe Road West Street, Xier Village, Luopu Street, Panyu District, Guangzhou

Phone: +86 13533063770

WeChat : +86 13533063770

WhatsApp: +86 13533063770

Email: chinatmcon@163.com

Alternatively, click on the instant messaging tool on the [www.china-tmcon.com](http://www.china-tmcon.com) website to answer your questions online

Thank you very much for choosing TMCON products,  
In order to better use this product, please read the following before using.

## ■ Safety precautions

---

### Attention

Do not touch the terminals while power is on, otherwise minor injuries may occur due to electric shock.



Do not allow metal objects, conductors, debris (such as cuttings) from installation work, moisture, or other foreign matter to enter the digital controller, the setup tool ports, or between the pins on the connectors on the Setup Tool cable. Otherwise it may cause electric shock, short circuit or machine malfunction.



Do not use the product where subject to flammable or explosive gas. Otherwise, it may cause mild injury due to the explosion.



Never disassemble, modify, or repair the product or touch any of the internal parts. Otherwise, it may cause mild electric shock, fire, and equipment failure.



This equipment is an open processing controller. Do not use it in a control cabinet where fire may occur. When using more than 2 open-circuit switches, please turn off all switches before repair inspection, so that the product is in a power-off state.



## ■ Main features

---

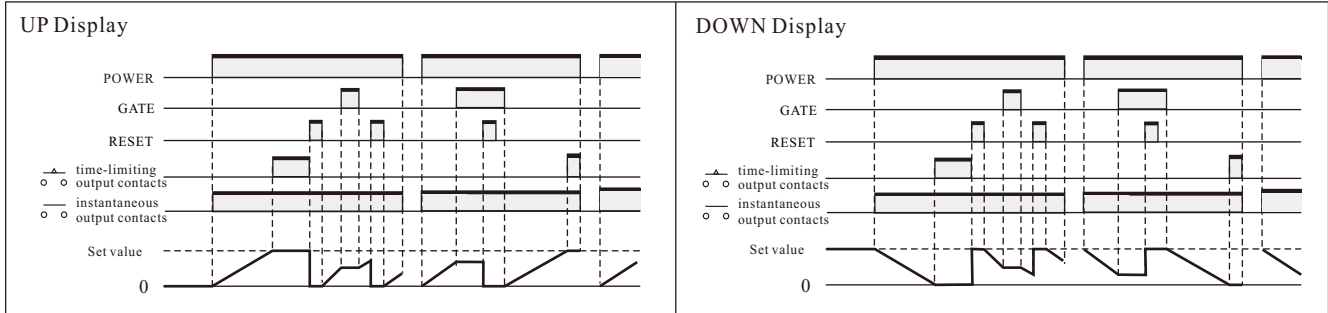
- DIN 48×48mm standard size, LED high brightness Nixie tube display.
- Adopt the dial switch setting with simple operation.
- Three time ranges: 99.99s (0.01s~), 99m59s (1s~), and 99h59m (1m~) can be set.
- Positive and countdown can be set.
- 8-pin and 11-pin connection method, combined with relay socket, can achieve panel or rail installation.
- The function is simple and universal, and the price is economical.
- Can set the power-off memory function mode, power-off data automatically saved.
- High performance switching power supply design ensures stable operation of microcomputers.
- Strong anti-interference performance, accurate and reliable timing.

## ■ Technical reference

Models	TMC5S	TMC5S-2C	TMC5S-2CH	TMC5S-B	TMC5S-BH
Input signal	Reset, Gate	None	None	Reset, Gate	Reset, Gate
Relay output	1 NO+1NC time-delay contacts	2 NO+2NC time-delay contacts	Instantaneous action contact+ time-delay contacts	2 NO+2NC time-delay contacts	Instantaneous action contact+ time-delay contacts
Connection mode	8 Pin	8 Pin	8 Pin	11 Pin	11 Pin
External dimension (mm)	48(high)×48(wide)				
Hole size (mm)	45(high)×45(wide)				
Power supply	AC100~240V 50/60Hz or AC/DC12~24V (The default delivery is 100~240V, If you need 12~24V, please declare the voltage at the time of ordering)				
Permissible voltage range	85~110%				
Power consumption	About 5VA (AC240V), about 3.2 VA (DC24V)				
Display mode	LED Nixie tube display				
Time Frame	99.99s (0.01s~), 99m59s (1s~), 99h59m (1m~)				
Timing mode	Elapsed time (Up) or remaining time (Down) can selectable settings				
Input method	NPN no voltage input (Contact signal, NPN sensor signal)(short circuit impedance: Max 1K $\Omega$ , residual voltage: Max 3VDC, open circuit impedance: min 100K $\Omega$ )				
Minimum input signal width	20ms				
Output mode	A2 (power-on delay)				
Reset mode	Power Reset, external signal reset (only TMC5S, TMC5S-B, TMC5S-BH models with external signal reset)				
Accuracy error	$\pm 0.01\% \pm 0.05$ s (power start), $\pm 0.005\% \pm 0.03$ s (signal start)				
Control output	Relay output, contact capacity: 3A/AC250V resistive load				
Insulation withstand voltage	AC2000V 50/60Hz 1min				
Usage environment	Temperature -10~+60°C (non freezing), humidity: 25~85% RH				

# Output mode action diagram

## Timing Chart





# ■ Wiring diagram

## Terminal Arrangement

