



特点 Features

- 多种工作模式
- 多时段控制
- 采用开关电源，宽电压使用范围
- 端子型和插针型，双接线方式，更方便接线盒维护
- Multiple working modes
- Multiple intervals control
- Switching power supply is adopted, with wide voltage range
- Terminal type and pin type, double wiring mode, more convenient for junction box maintenance



选型说明 Model Designation

C DH 48 S - 1Z 3
| | | | | |
1 2 3 4 5 6

序号 No	项目 Item	代号 Code	说明 Description
①	公司名称 Company name	C	昌得电气科技有限公司 CNTD
②	系列 Series	DH	时间继电器 Timer Relay
③	安装尺寸 Installation dimension	48	W48xH48mm
		72	W72xH72mm
④	安装方式 Installation mode	S	面板式、35mm导轨式 Panel type, 35mm guide rail type
		M	面板式 Panel type
⑤	工作模式 Working mode	1Z	一组延时继电器输出，带复位，暂停功能 A set of time delay relay output, with reset and pause functions
		2Z	二组延时继电器输出 Two sets of delay relay output
		2ZT	二组延时继电器输出，带复位，暂停功能 Two sets of delay relay output, with reset and pause functions
		S	一组循环延时带复位暂停功能 One set of cycle delay with reset pause function
		2S	二组循环延时 Two sets of cycle delay
		2ST	二组循环延时，带复位，暂停功能 Two sets of cycle delay, with reset and pause functions
		2ZH	一组延时继电器输出，一组瞬动继电器输出 One group of time delay relay output and one group of instantaneous relay output

⑥	额定电压 Rated voltage	无	100-240VAC
		1	24-48VDC
		2	12VDC
		3	380VAC
		4	12VAC
		5	24VAC
		6	36VAC
		1-9数字组合 Digital combination	定制电压 Custom voltage

延时范围 Delay Range

CDH48S(默认) Default

开关位置 Switch position	延时范围 Delay range
H	1M-99H99M
M	1S-99M99S
S	0.01S-99.99S

CDH48S-S

开关位置 Switch position	延时范围 Delay range
0.1S	0.1S-9.9S
S	1S-99S
0.1M	0.1M-9.9M
M	1M-99M
0.1H	0.1H-9.9H
H	1H-99H
10H	10H-990H

国际认证规格 International Certification Specifications

认证规格 Certification specifications	规格 Specifications	文件No. Document
CCC	GB/T 14048.5	请咨询昌得代表处 Please consult the CNTD Representative Office
CE	EN 60947-5-1	

安全规格认证额定值 Safety Specification Certification Rating

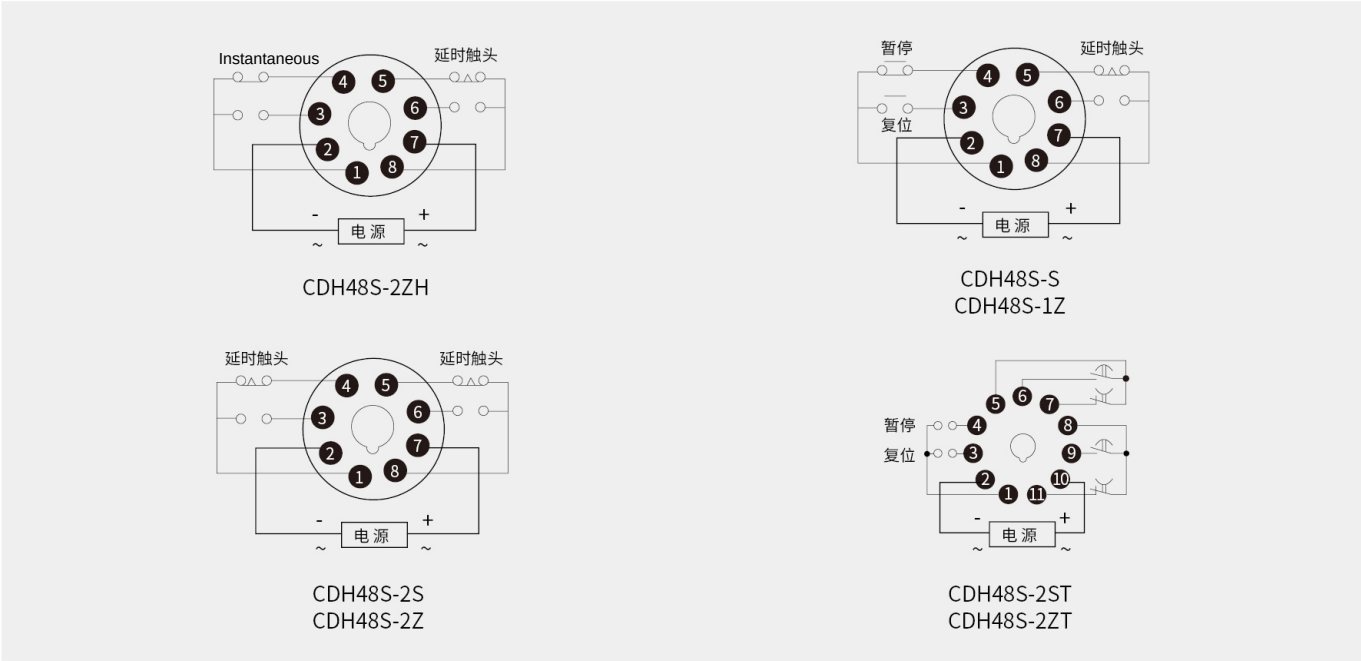
CCC(GB/T 14048.5)

类型与额定值 Type and Rating
AC-15 AC380V、AC250V 3A DC-12 DC24V~48V 3A

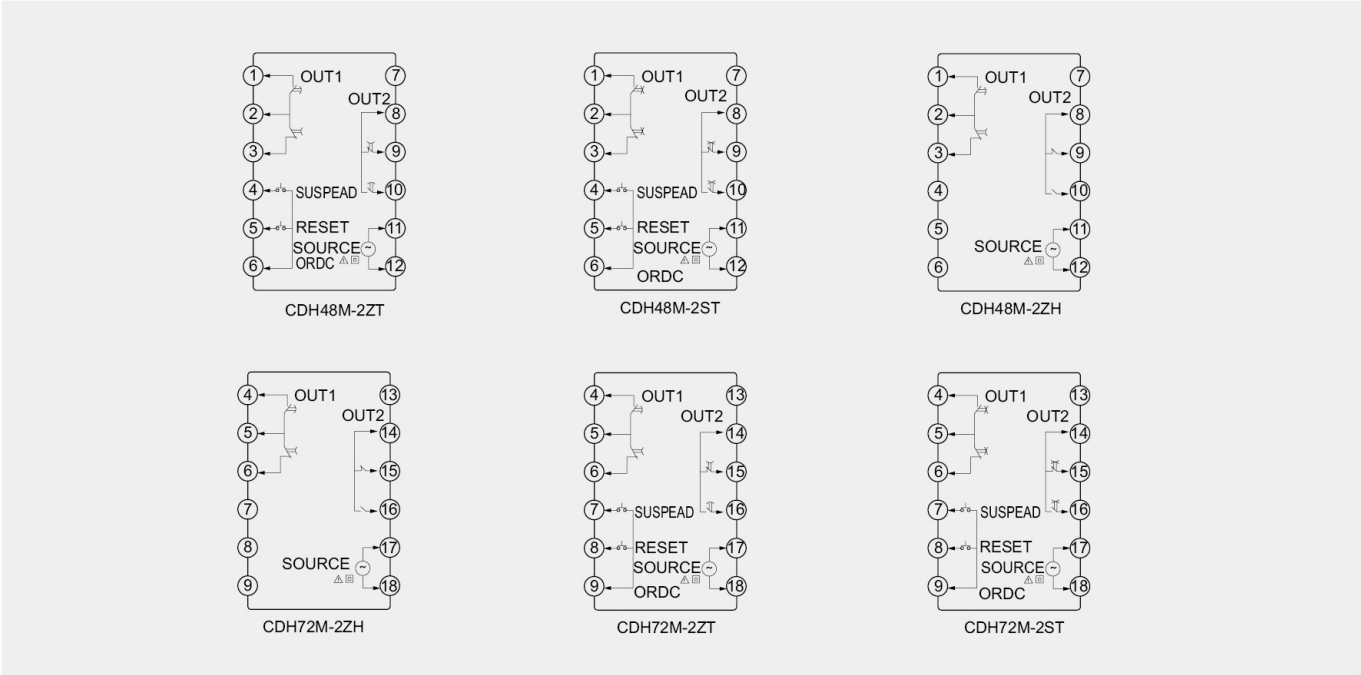
电气规格 Electrical Specification

显示位数 Display digit	四位数码管显示 Four digit nixie tube display
额定电压 Rated voltage	100-240VAC, 50Hz
工作环境 Work environment	环境温度: -25~+70℃, 相对湿度35~95%RH(温度越高湿度越低, 无水凝) Ambient temperature: -25 ~ +70 °C, relative humidity 35 ~ 95% RH (the higher the temperature, the lower the humidity, and there is no water condensation)
接线方式 Wiring mode	接线端子 Terminal block
触电容量 Electric shock capacity	5A AC250V
重复误差 Repetition error	延时范围大于1S时, Er≤1%; 延时范围小于1S时, Dr≤50ms When the delay range is greater than 1s, er ≤ 1%; When the delay range is less than 1s, Dr ≤ 50ms
海拔 Altitude	≤2000M
安装方式 Installation mode	面板式、35mm导轨式 Panel type, 35mm guide rail type

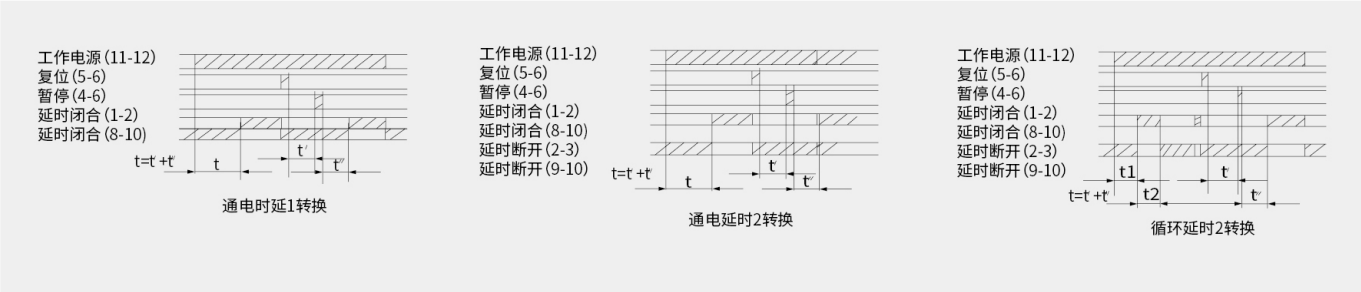
Plug-In Socket Connections



接线图 Wiring Diagram



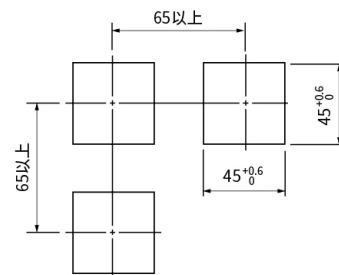
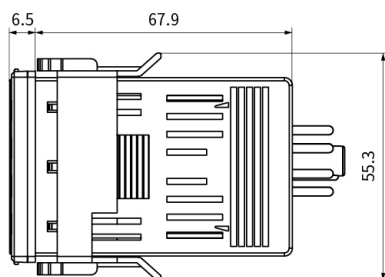
工作时序图 Working sequence diagram



外观和尺寸 Appearance and Dimension

CDH48S

48×48mm



常用型号 Common Model

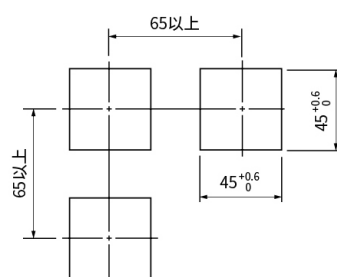
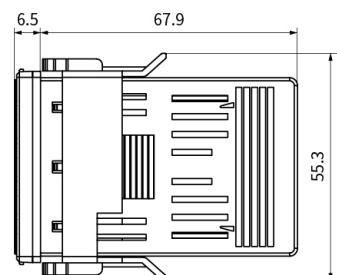
产品型号 Product model	产品参数 Product parameter	额定电压 Rated voltage
CDH48S-1Z	一组延时继电器输出 带复位暂停功能 A set of delay relay outputs with reset pause function	100-240VAC
CDH48S-2Z	二组延时继电器输出 Two sets of delay relay outputs	100-240VAC
CDH48S-2ZT	二组延时继电器输出 带复位暂停功能 Two sets of delay relay output with reset pause function	100-240VAC
CDH48S-S	一组循环延时继电器输出 带复位暂停功能 A set of cyclic delay relay outputs with reset pause function	100-240VAC
CDH48S-2S	二组循环延时继电器输出 Two sets of cyclic delay relay outputs	100-240VAC
CDH48S-2ST	二组循环延时继电器输出 带复位暂停功能 Two sets of cyclic delay relay output with reset pause function	100-240VAC
CDH48S-2ZH	一组延时继电器输出 一组瞬动继电器输出 A set of time delay relays outputs a set of instantaneous relay outputs	100-240VAC

注：以上为常用型号参考，未在表格内的参考选型说明。

Note: The above is a common model reference, not in the table reference selection description.

CDH48M

48×48mm



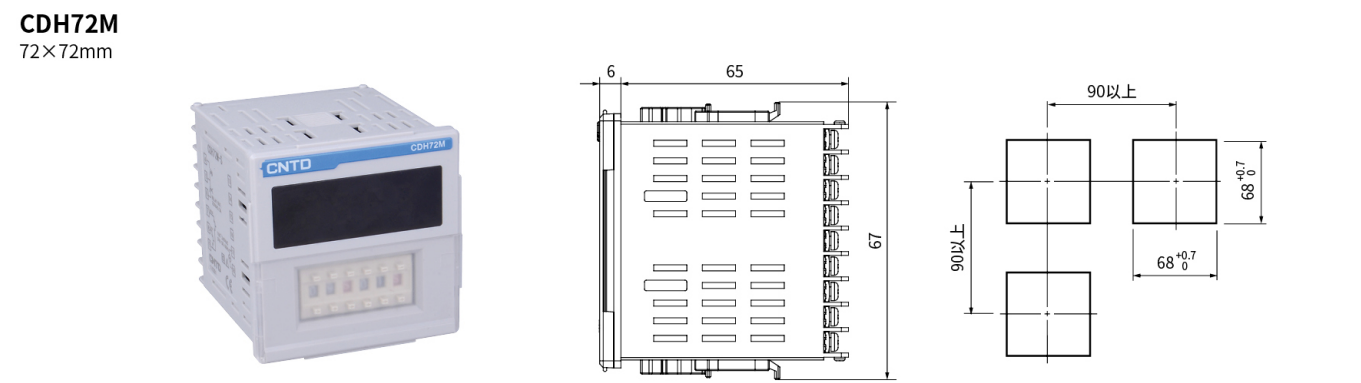
常用型号 Common Model

产品型号 Product model	产品参数 Product parameter	额定电压 Rated voltage
CDH48M-1Z	一组延时继电器输出 带复位暂停功能 A set of delay relay outputs with reset pause function	100-240VAC
CDH48M-2Z	二组延时继电器输出 Two sets of delay relay outputs	100-240VAC
CDH48M-2ZT	二组延时继电器输出 带复位暂停功能 Two sets of delay relay output with reset pause function	100-240VAC
CDH48M-S	一组循环延时继电器输出 带复位暂停功能 A set of cyclic delay relay outputs with reset pause function	100-240VAC
CDH48M-2S	二组循环延时继电器输出 Two sets of cyclic delay relay outputs	100-240VAC
CDH48M-2ST	二组循环延时继电器输出 带复位暂停功能 Two sets of cyclic delay relay output with reset pause function	100-240VAC
CDH48M-2ZH	一组延时继电器输出 一组瞬动继电器输出 A set of time delay relays outputs a set of instantaneous relay outputs	100-240VAC

注：以上为常用型号参考，未在表格内的参考选型说明。

Note: The above is a common model reference, not in the table reference selection description.

外观和尺寸 Appearance and Dimension



常用型号 Common Model

产品型号 Product model	产品参数 Product parameter	额定电压 Rated voltage
CDH72M-1Z	一组延时继电器输出 带复位暂停功能 A set of delay relay outputs with reset pause function	100-240VAC
CDH72M-2Z	二组延时继电器输出 Two sets of delay relay outputs	100-240VAC
CDH72M-2ZT	二组延时继电器输出 带复位暂停功能 Two sets of delay relay output with reset pause function	100-240VAC
CDH72M-S	一组循环延时继电器输出 带复位暂停功能 A set of cyclic delay relay outputs with reset pause function	100-240VAC
CDH72M-2S	二组循环延时继电器输出 Two sets of cyclic delay relay outputs	100-240VAC
CDH72M-2ST	二组循环延时继电器输出 带复位暂停功能 Two sets of cyclic delay relay output with reset pause function	100-240VAC
CDH72M-2ZH	一组延时继电器输出 一组瞬动继电器输出 A set of time delay relays outputs a set of instantaneous relay outputs	100-240VAC

注：以上为常用型号参考，未在表格内的参考选型说明。
Note: The above is a common model reference, not in the table reference selection description.

尺寸 Dimension

型号 Model	面板尺 Panel size	壳体尺寸(高X宽X长) Shell size (H x W x L)	开孔尺 Opening size
CDH48S	48x48	48x48x103	45x45
CDH72M	72x72	72x72x81	68x68

使用说明 Instructions

- 1、延时设置:

a)用手卡住盖板左右两侧的凹形部分向外拉(如图1);

b)按要求设置好延时间和时段(如图2);

c)设置完毕后盖好盖板(如图3)。
- 2.按照时间继电器外壳标签上的接线图，参考电路举例正确接线，电源电压和频率必须符合要求。
- 3.调整拨码开关，预置好延时时间，接通电源，时间继电器开始按工作时序运行。
1. Delay setting:

a) Clamp the concave parts on the left and right sides of the cover plate by hand and pull outward (as shown in Figure 1);

b) Set the delay time and time period as required (as shown in Figure 2);

c) After setting, cover the cover (as shown in Figure 3).
- 2.According to the wiring diagram on the label of the time relay housing and the reference circuit, the wiring is correct, and the power supply voltage and frequency must meet the requirements.
- 3.Adjust the dial switch, preset the delay time, turn on the power supply, and the time relay starts to operate according to the working sequence.

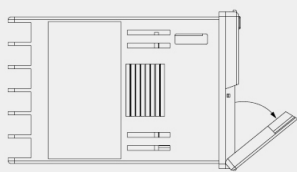


图1 Figure 1

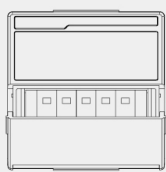


图2 Figure 2

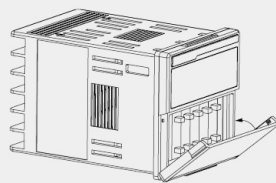
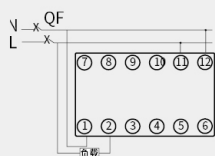
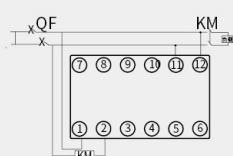
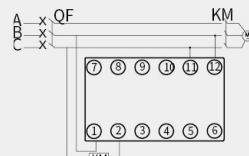
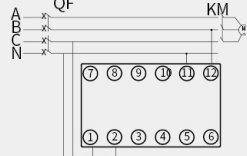


图3 Figure 3

- 4、因时间继电器具有记忆功能, 需通电前参照上图所示预置好延时时间, 通电后预置的时间无效, 时间继电器重复启动间隔时间应 $\geq 0.5s$ 。
- 5、CDH48□-1Z功能简述:把拨码开关设置好, 接通电源, 开始计时, 到预置时间, 显示窗左上角指示灯亮, 延时触点转换, 实现定时控制。
- 6、CDH48□-S功能简述:延时设置见.上图2, 设置T1. T2的时基和预置数, 然后接通电源, 右边两位数码管显示T2的延时数据, 同时T2指示灯亮, 当延时到达T2设定值后, 时间继电器动作, 同时左边两位数码管显示T1的延时数据, T1指示灯亮, 当延时到达T1设定值后, 时间继电器释放, T2又开始延时, 如此实现循环延时控制。
- 7、复位功能:在任意时刻接通复位端子, 时间继电器恢复到初始状态。
- 8、暂停功能:在计时过程中接通暂停端子, 计时停止, 且显示此刻的时间, 断开后继续计时, 利用此功能可作累时器用。
- 9、在强电环境且复位与暂停端接导线较长时, 请使用屏蔽导线。
- 10、复位与暂停端子切勿输入电压, 以免损坏产品。

- 4.Due to the memory function of the time relay, the delay time shall be preset according to the above figure before power on. The preset time after power on is invalid, and the repeated start interval of the time relay shall be $\geq 0.5s$.
- 5.Cdh48 □ - 1z Function Description: set the dial switch, turn on the power supply, start timing, reach the preset time, the indicator light in the upper left corner of the display window is on, and the delay contact is switched to realize timing control.
- 6.Cdh48 □ - s Function Description: see for delay setting In Figure 2 above, set T1 The time base and preset number of T2, and then turn on the power supply. The two digit nixie tubes on the right display the delay data of T2, and the T2 indicator light is on. When the delay reaches the T2 set value, the time relay acts. At the same time, the two digit nixie tubes on the left display the delay data of T1, and the T1 indicator light is on. When the delay reaches the T1 set value, the time relay releases and T2 starts to delay, so as to realize the cyclic delay control.
- 7.Reset function: turn on the reset terminal at any time, and the time relay will return to the initial state.
- 8.Pause function: in the process of timing, turn on the pause terminal, the timing will stop, and the time at the moment will be displayed. After disconnecting, continue the timing. This function can be used as a timer.
- 9.In strong current environment and long reset and pause termination wires, please use shielded wires.
- 10.Do not input voltage to reset and pause terminals to avoid damaging the product.

例1
Example 1例2
Example 2例3
Example 3例4
Example 4

- 1、单相负载时, 若负载阻性电流 $\leq 3A$ 或感性电流 $\leq 0.5A$, 时间继电器直接控制, 接线参考例1;若负载阻性电流 $> 3A$ 或感性电流 $> 0.5A$, 时间继电器通过交流接触器扩容, 接线参考例2;三相负载时, 交流接触器和时间继电器电源为AC380V, 接线参考例3;交流接触器和时间继电器电源为AC220V时, 接线参考例4。
- 2、示例时间继电器所起的功能为:当接通电源时, 负载或KM (交流接触器)得电, 经延时到预置值时, 负载或KM(交流接触器)失电。
- 注1:负载可为路灯或灯泡, 可直接接在路灯或灯泡端口的两根线上(如例1所示)。
- 注2: KM为交流接触器的线圈, A1. A2两端可按例2、例3、例4接线。
- 注3:例3中的时间继电器及KM的工作电源均为AC380V, 应注意所选用产品的电压等级。

1. In case of single-phase load, if the load resistive current $\leq 3A$ or inductive current $\leq 0.5A$, the time relay is directly controlled. Refer to example 1 for wiring; If the load resistive current is $> 3A$ or inductive current is $> 0.5A$, the capacity of the time relay is expanded through the AC contactor. Refer to example 2 for wiring; In case of three-phase load, the power supply of AC contactor and time relay is AC380V. Refer to example 3 for wiring; When the power supply of AC contactor and time relay is AC220V, refer to example 4 for wiring.
2. The function of the example time relay is: when the power is connected, the load or km (AC contactor) is powered on. When the time delay reaches the preset value, the load or km (AC contactor) is powered off.
- Note 1: the load can be street lamp or bulb, which can be directly connected to the two lines of the street lamp or bulb port (as shown in example 1).
- Note 2: KM is the coil of AC contactor, A1 Both ends of A2 can be wired according to example 2, example 3 and example 4.
- Note 3: the working power supply of time relay and KM in example 3 is AC380V. Pay attention to the voltage level of the selected product.

使用注意事项 Using Precautions

本公司产品是作为工业产品而设计生产，严格遵守工业产品标准。我司明确声明，除非经过特殊设计并得到我司明确书面确认，我司产品不适用于以下应用场合：

- 要求极高可靠性的应用场合，包括核能、燃气、电力等要求长期稳定运行的系统。
- 要求极高安全性的应用场合，涉及人身安全与财产的情况。
- 苛刻条件、严酷环境的应用场合，包括室外、存在化学污染、电磁、振动或冲击影响的环境。
- 有火灾或爆炸风险的应用场合，包括存在易燃易爆性气体、强酸强碱化学品等物质的环境。
- 涉及军工用途、航天航空项目的应用场合。

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- Applications requiring very high security, situations involving personal safety and property.
- Applications in harsh conditions, harsh environments, including outdoor, chemical contamination, electromagnetic, vibration or shock effects.
- Applications where there is a risk of fire or explosion, including environments where flammable and explosive gases, strong acids and alkali chemicals are present.
- Applications involving military use and aerospace projects.