

ULTRASmart

Modules

CATALOGUE

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**RELAYS
and
TIMERS**

Electronic Modules

Timers and Relays

ULTRAsmart's electronic modules are small, high quality, low cost, easy to use units mainly focussed on the security, electronics, and automation markets.

Their modular design means the units can be used in a very wide range of applications including to enhance existing circuitry outputs, in combination to create simple PLC type controllers, or individually.

ULTRAsmart is an Australian business providing high quality, locally designed and manufactured products.

The modules fall into two categories:

- ❑ **Timers**
- ❑ **Relays**

Most of our current range can be supplied as either:

- ❑ **Circuit Board (also called *Card* or *PCB*) modules (mounting tape included), or**
- ❑ **Boxed (DIN rail or screw mountable) modules**



DualTimer12, DT12DC8/03. PCB module

1.0 Timers — PCB and Boxed

DualTimers: 12v DC and 24v DC models. Positive or Negative Trigger.

1. PCB / CIRCUIT BOARD MODELS

- Professional Appearance:** PCB with white writing on solid black background creates a very professional finish.
- High quality solder connections:** Double sided PCB, with tinned through holes. Better electrical and mechanical connections for greater reliability.
- Mechanically and electrically robust:** Designed from the ground up for strength and stability.
- Small footprint:** 87 mm (L) x 33 mm (W) x 24 mm (H)

1.1 DualTimer12: DC12DC8/03

- Supply voltage : 12 volt DC*
- Two Time Modes:** a Delay mode and a Time Out mode.
 - Timer settings from **1/4 second to 30 minutes.**
 - Relay output** (high quality OMRON G5LE model, SPDT contacts) with back EMF protection diode. Max relay switch rating is 5 amp at 240 VAC, and 8 amp at 30 volt DC.
 - Positive** (3 to 24 volt DC, Hi) or **Negative** (0 volt DC, Lo) **Trigger.**
 - Trigger has in-built hysteresis (debouncing) to **improve stability in "dirty" electronic environments** or when using mechanical switches.
 - Alternative Trigger setup for **trigger on broken circuit** (loss of Trigger voltage).
 - Relay On **LED indicator.**
 - Easy to use wire connection **terminals.**
 - Supplied with **mounting tape.**



DualTimer12, DT12DC8/03. PCB module

1.2 DualTimer24: DC24DC8/03

- Supply voltage : 24 volt DC*
- Otherwise the same features as the 12v DC module, DualTimer12 above.

2. BOXED MODELS

- DIN rail or surface mountable.** Just change the position of the two clips on the back of the enclosure.
- Surface mount holes** in DIN clips: 4mm diameter.
- Enclosure is moulded grey UL94-V0 **flame retardant lexan®** construction.
- Enclosed base** provides insulation.
- Dimensions:** 94mm DIN or 104mm Surface mount (L) x 36m (W) x 58mm (H)

2.1 DualTimer12d: DC12DC8/03d

- Supply voltage : 12 volt DC*
- Boxed version of the 12v DC PCB module, DualTimer12.

2.2 DualTimer24d: DC24DC8/03d

- Supply voltage : 24 volt DC*
- Boxed version of the 24v DC PCB module, DualTimer24.



DualTimer12d, DT12DC8/03d. Boxed module

2.1 Relays — PCB

Basic Relay, and RelayPair Modules. 12v DC and 24v DC models.

1. PCB / CIRCUIT BOARD MODELS

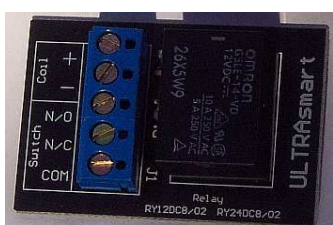
- ❑ **Professional Appearance:** PCB with white writing on solid black background creates a very professional finish.
- ❑ **High quality solder connections:** Double sided PCB, with tinned through holes. Better electrical and mechanical connections for greater reliability.
- ❑ **Mechanically and electrically robust:** Designed from the ground up for strength and stability.
- ❑ **Small footprint**

1.1 Basic12 Volt Coil Power Relay Module: RY12DC8/02

- Supply voltage : 12 volt DC
- ❑ **Relay:** high quality OMRON G5LE model, SPDT contacts.
 - ❑ **Max relay switch rating** is 5 amp at 240 VAC, and 8 amp at 30 volt DC.
 - ❑ **Back EMF protection**
 - ❑ Easy to use wire connection **terminals**.
 - ❑ Supplied with **mounting tape**.
 - ❑ **Dimensions:** 50mm (L) x 34mm (W) x 24mm (H)

1.2 Basic24 Volt Coil Power Relay Module: RY24DC8/02

- Supply voltage : 24 volt DC
- ❑ Otherwise the same features as the 12v DC module, Basic12 above.



Basic12, RY12DC8/02. PCB module

1.3 RelayPair12 Power Relay Module: RP12DC8/03

Can be broken up into 2 individual modules

Supply voltage : 12 volt DC

- ❑ **Pair of Relay modules** on one PCB
- ❑ **Relay On LED** indicator
- ❑ **Relay:** high quality OMRON G5LE model, SPDT contacts.
- ❑ **Max relay switch rating** is 5 amp at 240 VAC, and 8 amp at 30 volt DC.
- ❑ **Back EMF protection**
- ❑ Easy to use wire connection **terminals**.
- ❑ Supplied with **mounting tape**.
- ❑ **Dimensions:** 87 mm (L) x 33 mm (W) x 24 mm (H)

1.4 RelayPair24 Power Relay Module: RP24DC8/03

Can be broken up into 2 individual modules

Supply voltage : 24 volt DC

- ❑ Otherwise the same features as the 24v DC module, RelayPair12.



RelayPair12, RP12DC8/03. PCB module

2.2 Relays — Boxed

RelayPair Modules. 12v DC and 24v DC models.

1. **BOXED MODELS**

- DIN rail or surface mountable.**
Just change the position of the two clips on the back of the enclosure.
- Surface mount holes** in DIN clips: 4mm diameter.
- Enclosure is moulded grey UL94-V0 **flame retardant lexan®** construction.
- Enclosed base** provides insulation.
- Dimensions:** 94mm DIN or 104mm Surface mount (L) x 36m (W) x 58mm (H)

1.1 **RelayPair12d: RP12DC8/03d**

Supply voltage : 12 volt DC

- Boxed version of the 12v DC PCB module, RelayPair12.
- Pair of Relay modules** on one PCB
- Relay On LED** indicator
- Relay:** high quality OMRON G5LE model, SPDT contacts.
- Max relay switch rating** is 5 amp at 240 VAC, and 8 amp at 30 volt DC.
- Back EMF protection**
- Easy to use wire connection **terminals**.

1.2 **RelayPair24d: RP24DC8/03d**

Supply voltage : 24 volt DC

- Otherwise the same features as the RelayPair12d, RP12DC8/03d



RelayPair12d, RPT12DC8/03d.
Boxed module