

APAX-5060

APAX-5080

12-ch Relay Output Module

4/8-ch High/Low Speed Counter Module



APAX-5060



Specifications

General

- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **Weight** 195 g
- **Power Consumption** 2 W @ 24 V_{DC} (typical)
- **Status Display** LED per channel
On: Logic level 1
Off: Logic level 0

Relay Output

- **Channels** 12
- **Relay Type** Form A (SPST)
- **Switching Capacity and Lifetime of the Contact (for resistive load)**
VDE: 30,000 operations (5 A @ 250 V_{AC},
10 operations/minute at 8°C)
70,000 operations (5 A @ 30 V_{DC},
10 operations/ minute at 85°C)
UL: 60,000 operations (5 A @ 250 V_{AC})
100,000 operations (5 A @ 30 V_{DC})
Mechanism: 20,000,000 operations
(no load, 300 operations/min)
- **Breakdown Voltage** 500 V_{AC} (50/60 Hz)
- **Contact Resistance** 30 mΩ (maximum)
- **Insulation Resistance** 1 GΩ (minimum) at
500 V_{DC}

Protection

- **Isolation Between Channels and Backplane** 2,500 V_{DC}

Environment

- **Operating Temperature** -10 ~ 60°C (when mounted vertically)
-20 ~ 70°C (for PE version)
- **Storage Temperature** -40 ~ 70°C
- **Relative Humidity** 5 ~ 95% (non-condensing)

Ordering Information

- **APAX-5060** 12-ch Relay Output Module



APAX-5080



Specifications

General

- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **Weight** 170 g
- **Power Consumption** 2.5 W @ 24 V_{DC} (typical)
- **Status Display** LED per channel (for DI/O only)
On: Logic level 1; Off: Logic level 0

Counter/Frequency Input

- **Channels & Mode** 8 (Up Counter, High/Low Freq. and Wave Width mode)
4 (Pulse and Direction, Up/Down Pulse, A/B Phase)
- **Counting Range** 32-bit + 1-bit overflow
- **Minimum Pulse Width** 1 μs for High Freq. mode; 1 ms for Low Freq. mode
- **Counter Frequency** 0.1 Hz ~ 10 Hz for Low Freq. mode and Wave Width mode
10 Hz ~ 1M Hz for High Freq. mode and other modes
- **Input Voltage** For "0" signal: 0 ~ 3 V_{DC}; For "1" signal: 10 ~ 30 V_{DC}
- **Accuracy** 0.1% for Low Freq. mode
- **Input Filter** 0.1 us ~ 40 ms

Digital Input

- **Channels** 4
- **Type** Sink (wet contact)
- **Input Voltage** For "0" signal: 0 ~ 3 V_{DC}; For "1" signal: 10 ~ 30 V_{DC}

Digital Output

- **Channels** 4 (sink type)
- **Output Voltage Range** 8 ~ 35 V_{DC}
- **Normal Output Current** 0.5 A (per channel)

Protection

- **Isolation Between Channels and Backplane** 2,500 V_{DC}
- **Short Circuit Protection (For DO channel)**
- **Thermal Shutdown Protection (For DO channel)**

Environment

- **Operating Temperature** -10 ~ 60°C (when mounted vertically)
- **Storage Temperature** -40 ~ 70°C
- **Relative Humidity** 5 ~ 95% (non condensing)

Ordering Information

- **APAX-5080** 4/8-ch High Speed Counter Module