# APAX-5046 APAX-5060 APAX-5080

### 24-ch Digital Output Module

### 12-ch Relay Output Module

### 4/8-ch High Speed Counter Module





CE. FCC class A

Off: Logic level 0



# **Specifications**

#### General

Certifications CE, FCC class A
 Dimensions 30 x 139 x 100 mm (W x H x D)
 Enclosure ABSLPC

Enclosure ABS+PC Weight 165 g

■ Power Consumption 2.5 W @ 24 V<sub>DC</sub> (typical)

Status Display
 LED per channel
 On: Logic level 1
 Off: Logic level 0

#### **Digital Output**

Channels
 Voltage Range
 24 (Sink Type)
 8 ~ 35 V<sub>DC</sub>

Rated Current Output 0.5 A (per channel, at signal

"1")

• Leakage Current 0.1 mA (at signal "0")

Switch Rate: Resistive load: 300 F

Resistive load: 300 Hz (max.) Inductive load: max. 20 Hz

(max.)

Lamp load: max. 200 Hz (5W lamp and under 50  $\Omega$ ,

24 V)

#### **Protection**

- 2,500 V<sub>oc</sub> Isolation Between Channels and Backplane
- Short Circuit Protection
- Thermal Shutdown Protection

#### **Environment**

Operating -10 ~ 60° C
 Temperature (when mounted vertically)

• Storage Temperature  $-40 \sim 70^{\circ}$  C

■ **Relative Humidity** 5 ~ 95% (non-condensing)

# **Ordering Information**

APAX-5046
 APAX-5001
 APAX-5002
 APAX-5343E
 24-ch Digital Output Module
 1-slot Backplane Module
 2-slot Backplane Module
 Power Supply for APAX

Expansion Module

# **Specifications**

Certifications

#### General

Dimensions (W x H x D)
 Enclosure ABS+PC
 Weight 195 g
 Power Consumption Status Display LED per channel On: Logic level 1

#### **Relay Output**

Channels 12
 Relay Type Form A (SPST)
 Contact Rating 5 A @ 250 V<sub>AC</sub>/30 V<sub>DC</sub> (Resistive load)

 Switching Capacity and Lifetime of the Contact (For Resistive Load)

 VDE:
 30,000 operations (5 A @ 250 V<sub>AC</sub>, 10 operations/minute at 8° C)

 70,000 operations (5 A @ 30 V<sub>DC</sub>, 10 operations/ minute at 85° C)

 UL:
 60,000 operations (5 A @ 250 V<sub>AC</sub>) 100,000 operations (5 A @ 30 V<sub>DC</sub>)

 Mechanism:
 20,000,000 operations (mo load, 300 operations/min)

• Contact Resistance  $30 \text{ m}\Omega$  (max.)

• Insulation Resistance 1  $G\Omega$  (min.) at 500  $V_{DC}$ 

#### Protection

 2,500 V<sub>DC</sub> Isolation Between Channels and Backplane

### **Environment**

Operating -10 ~ 60° C
Temperature (when mounted vertically)

• Storage Temperature  $-40 \sim 70^{\circ}$  C

Relative Humidity 5 ~ 95% (non-condensing)

### **Ordering Information**

APAX-5060 12-ch Relay Output Module
APAX-5001 1-slot Backplane Module
APAX-5002 2-slot Backplane Module
APAX-5343E Power Supply for APAX

Expansion Module

# **Specifications**

#### General

Certifications
 Dimensions
 (W x H x D)
 Enclosure
 Weight
 ABS+PC
 To g

Power Consumption Status Display

2.5 W @ 24 V<sub>DC</sub> (typical)
LED per channel
(for DI, DO channel)
On: Logic level 1
Off: Logic level 0

#### Counter/Frequency Input

• Channels and Mode 8 (Up and Frequency mode)

4 (Pulse/Direction, Up/Down, A/B phase mode)

 Counting Range 32-bit + 1-bit overflow/ underflow

Minimum Pulse Width 1 µs Counter Frequency 1 MHz (max.)

• Input Voltage For "0" signal: 0 ~ 3 V<sub>DC</sub> For "1" signal: 10 ~ 30 V<sub>DC</sub>

#### **Digital Input**

 Channels
 Type
 Input Voltage
 For "0" signal: 0 ~ 3 V<sub>DC</sub> For "1" signal: 10 ~ 30 V<sub>DC</sub>

#### **Digital Output**

Channels 4 (Sink Type)
 Output Voltage Range 8 ~ 35 Vpc
 Rated Output Current 0.5 A (per channel)

#### **Protection**

 2,500 V<sub>DC</sub> Isolation Between Channels and Backplane

Over Voltage Protection (For DI and counter channel)

Short Circuit Protection (For DO channel)

Thermal Shutdown Protection (For DO channel)

#### Environment

Operating -10 ~ 60° C
 Temperature (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

APAX-5001

APAX-5001

Module

APAX-5002 2-slot Backplane Module
 APAX-5343E Power Supply for APAX Expansion Module