

# APAX-5040

# APAX-5045

## 24-ch Digital Input Module

## 24-ch Digital Input/Output Module



APAX-5040



### Specifications

#### General

- **Certification** CE, FCC class A
- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **Enclosure** ABS+PC
- **Weight** 160 g
- **Power Consumption** 2 W @ 24 V<sub>DC</sub> (typical)
- **Status Display** LED per channel  
On: Logic level 1  
Off: Logic level 0

#### Digital Input

- **Channels** 24
- **Points per Common** 12
- **Type** Sink or Source Load
- **Input Voltage** Rated Value: 24 V<sub>DC</sub>  
For "0" signal: -5 ~ 5 V<sub>DC</sub>  
For "1" signal: 15 ~ 30 V<sub>DC</sub> and -15 ~ -30 V<sub>DC</sub>
- **Input Impedance** 10 k $\Omega$
- **Input Delay** From logic level 0 to 1: 0.2 ms  
From logic level 1 to 0: 0.2 ms
- **Operating Frequency** 3 kHz
- **Input Filter** 3 ms

#### Protection

- **2,500 V<sub>DC</sub> Isolation Between Channels and Backplane**
- **Over Voltage Protection**

#### 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-5040** 24-ch Digital Input Module
- **APAX-5040PE** 24-ch Digital Input Module with Wide Temperature



APAX-5045



### Specifications

#### General

- **Certification** CE, FCC class A
- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **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 Input

- **Channels** 12
- **Points per Common** 12
- **Type** Sink or Source Load
- **Input Voltage** Rated Value: 24 V<sub>DC</sub>  
For "0" signal: -5 ~ 5 V<sub>DC</sub>  
For "1" signal: 15 ~ 30 V<sub>DC</sub> and -15 ~ -30 V<sub>DC</sub>
- **Input Impedance** 10 k $\Omega$
- **Input Delay** From Logic level 0 to 1: 0.2 ms  
From Logic level 1 to 0: 0.2 ms
- **Operating Frequency** 3 kHz
- **Input Filter** 3 ms

#### Digital Output

- **Channels** 12 (Sink)
- **Voltage Range** 8 ~ 35 V<sub>DC</sub>
- **Rated Current Output** 0.5 A (per channel, at signal "1")
- **Permitted Current Output** Max. 0.75 A (at signal "1")
- **Leakage Current** 0.1 mA (at signal "0")
- **Switch Rate:** 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>DC</sub> Isolation Between Channels and Backplane**
- **Over Voltage Protection (for DI channel)**
- **Short Circuit Protection (For DO channel)**
- **Thermal Shutdown Protection (For DO channel)**

#### Environment

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

### Ordering Information

- **APAX-5045** 24-ch Digital Input/Output Module