

# APAX-5013 APAX-5017 APAX-5018

Vertrieb durch   
**AMC – Analytik & Messtechnik GmbH Chemnitz**  
 Heinrich-Lorenz-Str. 55 Tel.: +49/371/38388-0  
 09120 Chemnitz Fax: +49/371/38388-99  
 E-Mail: info@amc-systeme.de Web: www.amc-systeme.de

**8-ch RTD Module**

**12-ch Analog Input Module**

**12-ch Thermocouple Input Module**



APAX-5013



## Specifications

### General

- **Certification** CE, FCC class A
- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **Enclosure** ABS+PC
- **Weight** 170 g
- **Power Consumption** 2.5 W @ 24 V<sub>DC</sub> (typical)

### Analog Input

- **Channels** 8 (Differential)
- **Input Impedance** >10 MΩ
- **Input Type** Pt-100, Pt-200, Pt-500, Pt-1000, Balco, Ni 518 RTD (2-wire and 3-wire)
- **Temperature Range** Pt-100, Pt-200, Pt-500, Pt-1000: -120 ~ 130°C, -200 ~ 850°C  
 Supports both IEC 60751 ITS90 (0.03851 Ω/Ω/°C) and JIS C 1604 (0.03916 Ω/Ω/°C)  
 Balco 500: -30 ~ 120°C  
 Ni 518: -80 ~ 100°C, 0 ~ 100°C
- **Configure Different Range for Each Channel**
- **Resolution** 16-bit with accuracy ±0.1% of Full Scale Range
- **Sampling Rate** 10 sample/second (total)
- **Noise Rejection** Hardware Filter (50/60 Hz)
- **Wire Burn-out Detection** Yes

### Protection

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

### Environment

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

## Ordering Information

- **APAX-5013** 8-ch RTD Module



**ADVANTECH** iAutomation  
Premier Partner

Irrtum und Änderungen vorbehalten – auch ohne vorherige Ankündigung. Verwendete Hardware- und Softwarebezeichnungen, Marken sowie Firmennamen können eingetragene Warenzeichen sein und unterliegen somit den gesetzlichen Bestimmungen. / Information in this document is subject to change without prior notice. The software and hardware designations or brand names used in this text are in most cases trademarks or registered trademarks of their respective companies and are thus subject to law.



APAX-5017

APAX-5018



## Specifications

### General

- **Certification** CE, FCC class A
- **Dimensions (W x H x D)** 30 x 139 x 100 mm
- **Enclosure** ABS+PC
- **Weight** 170 g
- **Power Consumption (typical)** 4 W @ 24 V<sub>DC</sub> (APAX-5017)  
3.5 W @ 24 V<sub>DC</sub> (APAX-5018)

### Analog Input

- **Channels** 12 (Differential)
  - **Input Type** V, mV, mA (APAX-5017)  
V, mV, mA, Thermocouple (APAX-5018)
  - **Input Impedance** Voltage: >10 MΩ (APAX-5017), >1 MΩ (APAX-5018)  
Current: 120Ω (Current)
  - **Voltage/Current Range** ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20 mA (APAX-5017)  
±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20 mA (APAX-5018)
  - **Temperature Range (APAX-5018 only)** Type J (-210 ~ 1200°C), Type K (-270 ~ 1372°C), Type T (-270 ~ 400°C), Type E (-270 ~ 1000°C), Type R (0 ~ 1768°C), Type S (0 ~ 1768°C), Type B (300 ~ 1820°C)
  - **Configure Different Range for Each Channel**
  - **Resolution** 16-bit with accuracy ±0.1% or better of Full Scale Range (Voltage), ±0.2% or better of Full Scale Range (Current)
- Note:** Refer to manual for Thermocouple accuracy
- **Sampling Rate** 12 samples/second (total)
  - **Noise Rejection** Hardware Filter (50/60 Hz)
  - **Wire Burn-out Detection** APAX-5017: Yes (4 ~ 20 mA only)  
APAX-5018: Yes (4 ~ 20 mA and Thermocouple)
  - **Common Mode Voltage** 200 V<sub>DC</sub>

### 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-5017** 12-ch Analog Input Module
- **APAX-5018** 12-ch Thermocouple Input Module