

# Expansion I/O Modules

## Introduction

These expansion modules are designed to increase functions of ARS-2610/ARS-2620 box PCs. The standard offerings include 2.5" SSD SATA tray, dual COM port module, dual CAN port module, and MVB port module. For larger-volume orders, users can specify their own customized modules, and build systems that offer powerful, best-fit, custom solutions.

## Single SSD Carrier with DIO

### Product Specifications

#### Digital Input

- Input Channels: 3
- Isolation: 2.5KVdc
- Digital Input Level:
  - Dry contact: Logic level 0: Open, Logic level 1: Close to GND
  - Wet contact: Logic level 0: 2V max, Logic level 1: 10V to 50V

#### Digital Output

- Output Channels: 3
- Isolation: 2.5KVdc
- Output Voltage: Open collector to 30V, 200mA max. load
- SSD: 2.5" SSD



## Dual COM Ports with Isolation

### Product Specifications

- Isolation: 2KV digital isolation
- FIFO: 256bytes
- Data Bits: 5,6,7,8
- Stop Bits: 1,1.5,2
- Flow Control: RTX/CTS, Xon/Xoff
- Baud Rate: 50bps ~ 921.6kbps



## Dual CAN Ports with Isolation

### Product Specifications

- Interface: CAN 2.0 A/B
- CAN Controller: MCP2515
- Signals: CAN-H, CAN-L
- Isolation: 2KV digital isolation
- Speed: Up to 1Mbps
- Connector Type: DB9 male



## Multifunction Vehicle Bus (MVB) Module

### Product Specifications

#### MVB Interface

- 4096 process data ports, full process data length on all ports
- Message data stack optionally available
- 350 Vrms galvanic isolation between MVB line A and B for ESD+ devices
- 500 Vrms galvanic isolation between MVB line A and B for EMD devices
- 500 Vrms galvanic isolation between MVB and internal logic
- Full compliant to IEC 61375
- Two different EMD insensitivity levels for different EMI requirements

#### MVB Bus Administrator

- Polling of all configured MVB ports
- Scanning for device attached to the MVB
- Initializing Message Data transfer

#### Connector Type

- DB9 male and female



## Ordering Information

System P/N	Product Description
AIO-SSD120-00A1E	Single SSD carrier with DIO for ARS-2610/ARS-2620
AIO-COM220-00A1E	Dual COM ports with Isolation for ARS-2610/ARS-2620
AIO-MVB120-00A1E	MVB port with Isolation for ARS-2610/ARS-2620
AIO-CAN220-00A1E	Dual CAN ports with Isolation for ARS-2610/ARS-2620

## Design & Manufacturing Services

Advantech provides customization services for expansion modules with desired I/Os.  
▪ For sales inquiries or further information, please contact us at [Rail@Advantech.com.tw](mailto:Rail@Advantech.com.tw)