ADAM-6317 ADAM-6350 ADAM-6360D

IoT OPC UA Ethernet I/O - Al Module

IoT OPC UA Ethernet I/O - DI/O Module

IoT OPC UA Ethernet I/O - SSR Relay Output Module







ADAM-6317



ADAM-6350

CEFC ROHS

ADAM-6360D

CEFC ROHS

Specifications

Analog Input

Channels 8 (differential)

 Sampling Rate 10 or 100 samples/ second

(total) 16 hits

Resolution 0 ~ 150mV. 0 ~ 500mV. Input Range

 $0 \sim 1V$, $0 \sim 5V$, $0 \sim 10V$, ±150 mV, ±500 mV, ±1V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20mA

Digital Input

Wet contact

Channels 11

 Dry contact logic 0: Open

logic 1: Closed to ground

logic 0: 0 ~ 3 V_{DC} logic 1: 10 ~ 30 V_{DC}

■ DI5~DI10 support 3 kHz counter input

■ DI5~DI10 support 3 kHz frequency input

Digital Output

Channels

 Output type Sink type, 30 V_{DC},

0.1A max. per channel

D04~D09 support 3 kHz pulse output

Specifications

Digital Input

Channels

 Dry contact logic 0: Open logic 1: Closed to ground

logic 0: 0 \sim 3 V_{DC} Wet contact logic 1: 10 ~ 30 V_{DC}

■ DI12~DI17 support 3 kHz counter input

■ DI12~DI17 support 3 kHz frequency input

Digital Output

Channels

Output type Sink type, 30 V_{DC}, 0.1A max. per channel

D012~D017 support 3 kHz pulse output

Specifications

Relay Output (PhotoMOS SPST)

Channels 8 (Form A) 1 À @25°C @30 Vnc **Contact rating** (Resistive and 0.7A @70°C @30 V_{DC}

Inductive load) Relay-on time 1.3 ms 0.8 ms Relay-off time Isolation (Relay 1500Vrms

output to power)

4A (100ms (1 pulse)) Peak Load Current 400mW / channel **Total Power**

Dissipation

On-state resistance 0.5Ω

Digital Input

Channels Dry contact

logic 0: Open logic 1: Closed to ground logic 0: 0 ~ 3 V_{DC} Wet contact

logic 1: 10 ~ 30 V_{nc} ■ DI8~DI13 support 3 kHz counter input

DI8~DI13 support 3 kHz frequency input

Digital Output

Channels

Sink type, 30 V_{DC}, Output type 0.1A max. per channel

D00~D05 support 3 kHz pulse output

Common Specifications

General

Power input $10 \sim 30 \ V_{DC}$ $2.9 \ W @ 24 \ V_{DC}$ (ADAM-Power Consumption

6317)2.8 W @ 24 VDC (ADAM-

6350)2.8 W @ 24 VDC (ADAM-

6360D) 2 x RJ-45 10/100 Mbps

2 x RJ-45 (LAN), Plug-in screw terminal block (I/O and power)

Watchdog System and Communication Protocol OPC UA, Modbus

Protection

LAN port

Connectors

Isolation 2,500 V_{DC} **Power Reversal Protection**

OPC UA

Max Monitored Items

(including all sessions) Max Sessions 4 (including security or non-security session)

Max Subscriptions per 1 Session

Support security/certificate management

Modbus/TCP

Modbus/TCP connection 4

Environment

Operating Temperature -25° C $\sim 70^{\circ}$ C

Storage Temperature

Storage Humidity 0 ~ 95% RH (non-condensing)

-25° C ~ 85° C **Operating Humidity** 20 ~ 95% RH (non-condensing)

Ordering Information

ADAM-6317-A1 OPC UA and Security

Remote I/O - AI Module

OPC UA and Security ADAM-6350-A1

Remote I/O - DI/O Module

 ADAM-6360D-A1 OPC UA and Security

Remote I/O - SSR Relay Output Module

ADAM-6317 ADAM-6350 **ADAM-6366**

IoT OPC UA Ethernet I/O - AI Module

IoT OPC UA Ethernet I/O - DI/O Module

IoT OPC UA Ethernet I/O - SSR Relay Output Module







CEFC ROHS





ADAM-6366

CEFC ROHS

Specifications

Analog Input

Channels 8 (differential)

 Sampling Rate 10 or 100 samples/ second

(total)

Resolution 16 hits Input Range 0 ~ 150mV, 0 ~ 500mV,

> $0 \sim 1V$, $0 \sim 5V$, $0 \sim 10V$, ±150 mV, ±500 mV, ±1V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20mA

Digital Input

Wet contact

Channels 11

Dry contact logic 0: Open

logic 1: Closed to ground

logic 0: 0 ~ 3 V_{DC} logic 1: 10 ~ 30 V_{DC}

■ DI5~DI10 support 3 kHz counter input

■ DI5~DI10 support 3 kHz frequency input

Digital Output

Channels

 Output type Sink type, 30 VDC,

0.1A max. per channel

D04~D09 support 3 kHz pulse output

Specifications

Digital Input

Channels

logic 0: Open Dry contact logic 1: Closed to ground

 Wet contact logic 0: 0 ~ 3 V_{DC} logic 1: 10 ~ 30 V_{DC}

■ DI12~DI17 support 3 kHz counter input

DI12~DI17 support 3 kHz frequency input

Digital Output

Channels

Output type Sink type, 30 V_{DC}, 0.1A max. per channel

D012~D017 support 3 kHz pulse output

Specifications

Relay Output

Channels 6 (Form A) 0.25A@250V_{AC} Contact rating 2A@30V_{DC} · Relay-on time 3 ms

Relay-off time 5 ms **Electrical endurance** Resistive, 0.25A@250V_{AC}: at contact application 1x105 operations/min.

Resistive, 2A@30VDC: 1x105 operations/min.

• Insulation Resistance 1 $G\Omega$

Digital Input

Channels

logic 0: Open logic 1: Closed to ground Dry contact

logic 0: 0 ~ 3 V_{DC} logic 1: 10 ~ 30 V_{DC} Wet contact

■ DI12~DI17 support 3 kHz counter input

DI12~DI17 support 3 kHz frequency input

Digital Output

Channels

 Output type Sink type, 30 VDC, 0.1A max. per channel

D00~D05 support 3 kHz pulse output

Common Specifications

General

Power input Power Consumption

 $\begin{array}{c} 10 \sim 30 \; V_{DC} \\ 2.9 \; W \; @ \; 24 \; V_{DC} \end{array}$ (ADAM-6317) 2.8 W @ 24 V_{DC} (ADAM-6350)

4.5 W @ 24 V_{DC} (ADAM-6366) 2 x RJ-45 10/100 Mbps 2 x RJ-45 (LAN), Plug-in

screw terminal block (I/O and power) System and Communication OPC UA, Modbus

Watchdog Protocol **Protection**

LAN port

Connectors

Isolation 2,500 V_{DC} **Power Reversal Protection**

OPC UA

Max Monitored Items

(including all sessions) **Max Sessions** 4 (including security or non-security session)

Max Subscriptions per 1 Session

Support security/certificate management

Modbus/TCP

Modbus/TCP connection 4

Environment

Operating Temperature -25° C $\sim 70^{\circ}$ C

Storage Temperature -25° C ~ 85° C **Operating Humidity** 20 ~ 95% RH

Storage Humidity

(non-condensing) Ò~95% RH (non-condensing)

Ordering Information

ADAM-6317-A1

OPC UA and Security Remote I/O - AI

Module

OPC UA and Security ADAM-6350-A1

Remote I/O - DI/O Module

ADAM-6366-A1

OPC UA and Security

Remote I/O - SSR Relay Output Module

ADAM-6520 Series

5-port 10/100 Mbps Industrial Ethernet Switches



Features

- Supports full/half duplex flow control
- Supports MDI/MDI-X auto crossover
- Embedded with a switch controller, supports auto-negotiation
- Supports +10 ~ 30 V_{DC} voltage power input
- Provides surge (EFT) protection 3,000 V
- (ADAM-6520L not equipped)

 Supports 4,000 V_{DC} Ethernet ESD protection (ADAM-6520L not equipped)
- Provides flexible mounting: DIN-rail, Wall, Stack
- Supports wide operating temperature range: -40 ~ 85° C (ADAM-65201)



Introduction

ADAM-6520 is a 5-port industrial-grade switch with Ethernet connectivity and from 10 to 100 Mbps transfer rates. (Auto-negotiation). Just like any other product in the ADAM family, ADAM-6520 can be mounted in three different ways: DIN rail, Wall and Stack. Solid industrial-grade design assures reliable operation in common application areas like: semi-conductor factories, inventory control environments, assembly lines, manufacturing and many more.

All modules support a wide voltage range of $+10 \sim 30 \text{ V}_{DC}$ over the terminal block, and $3{,}000 \text{ V}_{DC}$ surge (EFT) protection ensures that over-voltage is no concern. The wide operating temperature of ADAM-6520 goes from $-10 \sim 70^{\circ}$, while ADAM-65201 from $-40 \sim 85^{\circ}$. This permits them to be functional in harsh environments.

The six inclusive LED indicators make troubleshooting of the modules easier. Each port has a pair of LEDs that indicate link status and port activities. This easily informs users of any collisions, the link status, power failure and data receipts for immediate on-site diagnosis.

Specifications

Communications

Standard IEEE 802.3, 802.3u, 802.3x

LAN 10/100Base-TX
 Transmission Distance Up to 100 m
 Transmission Speed Up to 100Mbps

Interface

Connectors 5 x RJ-45

2-pin removable screw terminal (power)

• LED Indicators Power, Link/Speed

Power

Power Consumption ADAM-6520L: Max. 3W

ADAM-6520/6520I: Max. 2.4 W

■ Power Input 1 x Unregulated 10 ~ 30 V_{DC}

Mechanism

Dimensions (W x H x D) 70 x 102 x 27 mm

• **Enclosure** IP30, ABS+PC with solid mounting kits

Mounting DIN 35 rail, Wall, Stack

Protection

ESD (Ethernet)
 Surge (EFT for power)
 4,000 V_{DC} (ADAM-6520L not equipped)
 3,000 V_{DC} (ADAM-6520L not equipped)

Environment

• Operating Temperature

ADAM-6520: -10 ~ 70° C (14 ~ 158° F), Stack: -10 ~ 60° C (14 ~ 140° F) ADAM-6520L: 0 ~ 60° C (32 ~ 140° F), Stack: 0 ~ 50° C (32 ~ 122° F) ADAM-6520I: -40 ~ 85° C (-40 ~ 185° F), Stack: -40 ~ 75° C (-40 ~ 167° F)

Storage Temperature

ADAM-6520 : -20 ~ 80° C (-4 ~ 176° F) ADAM-6520L : -10 ~ 70° C (14 ~ 158° F) ADAM-6520I : -50 ~ 95° C (-58 ~ 203° F)

Operating Humidity
 Storing Humidity
 20 ~ 95 % (non-condensing)
 0 ~ 95 % (non-condensing)

■ MTBF 1.580.000 hrs

Certifications

Safety UL 60950-1, CAN/CSA-C22.2 No.60950

EMC
 U.S.A.: FCC Part 15 CISPR 22
 EU: EN55011, EN61000-6-4

EU: EN55011, EN61000-6-4 EN55022 Class A, EN61000-3-2/3 EN55024

IEC61000-4-2/3/4/5/6/8/11

EN61000-6-2

Ordering Information

ADAM-6520
 ADAM-6520L
 5-port 10/100 Mbps Industrial Ethernet Switch
 5-port 10/100 Mbps Industrial Unmanaged Ethernet

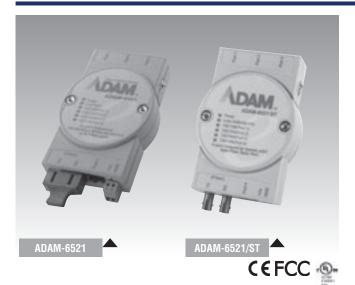
Switch

■ ADAM-6520I 5-port 10/100 Mbps Industrial Ethernet Switch w/Wide

Operating Temperature

ADAM-6521 Series

Industrial Ethernet
Switches with 4 x
10/100Base-TX Ports
& 1 x 100Base-FX
Fiber Optic Port



Features

- Provides 4 x 10/100 Mbps Ethernet ports with RJ-45 connector
- Provides 1 x 100 Mbps multi/single-mode fiber port with SC/ST connector
- Supports full/half duplex flow control
- Supports Integrated Loop-up engine
- Supports MDI/MDI-X auto crossover
- Provides broadcast storm protection
- Supports +10 ~ 30 V_{DC} voltage power input
- Supports 4,000 V_{DC} Ethernet ESD protection
- Provides flexible mounting: DIN-rail, Wall, Stack
- Supports operating temperatures from -10 ~ 65° C

Introduction

ADAM-6521 and ADAM-6521S are industrial-grade Ethernet switch with a fiber optic port that makes it possible to expand industrial networks fast and cost-effectively. ADAM-6521 and ADAM-6521S of 1 fiber port and 4-RJ-45 ports. With fiber optics, you can prevent noise interfering with your system and implement transmission distances up to 15 km.

ADAM-6521 and ADAM-6521S are especially suited for industrial environments with Ethernet networking needs such as: semi-conductor factories, inventory control environments, assembly line and production and more.

ADAM-6521 and ADAM-6521S support a wide voltage range of $+10 \sim 30 \text{ V}_{DC}$ over the terminal block, and $3,000 \text{ V}_{DC}$ surge (EFT) protection to protect it from being damaged by over-voltage. A wide operating temperature range from -10 to 65° C ($14 \sim 149^{\circ}$ F), makes it functional in harsh operating environments. They also have six inclusive LED indicators which make troubleshooting the ADAM-6521 and ADAM-6521S easier. Each port has a pair of LEDs that indicate link status and transmission speed. This function conveniently informs users of any collisions, the link status, power failure and data receipts for immediate on-site diagnostics.

Specifications

Communications

Standard IEEE 802.3, 802.3u, 802.3x
 LAN 10/100Base-T, 100Base-FX
 Transmission Distance Ethernet: Up to 100 m

Multi-mode Fiber: Up to 2 km (ADAM-6521, ADAM-6521/ST)

Single-mode Fiber: Up to 15 km (ADAM-6521S)

Transmission Speed Up to 100 Mbps

Interface

Connectors
 4 x RJ-45, 1 x SC type fiber connector (ADAM-6521,

ADAM-6521S) or 1 x ST type fiber connector

(ADAM-6521/ST)

2-pin removable screw terminal (power)
Power, Link (100Base-FX), 100/10M (Ethernet)

Power

LED Indicators

Power Consumption ADAM-6521, ADAM-6521/ST: Max. 3 W

ADAM-6521S: Max. 4 W

■ Power Input 1 x Unregulated 10 ~ 30 V_{DC}

Mechanism

Dimensions (W x H x D) 70 x 112 x 27 mm

Enclosure
 IP30, ABS+PC with solid mounting kits

Mounting DIN 35 rail, Wall, Stack

Protection

ESD (Ethernet) 4,000 V_{DC}
 Surge (EFT for power) 3,000 V_{DC}

Environment

• Operating Temperature $-10 \sim 65^{\circ} \text{ C} (14 \sim 149^{\circ} \text{ F})$

stack: -10 ~ 60° C (14 ~ 140° F)

Storage Temperature
 Operating Humidity
 Storage Humidity
 Operating Humidity

MTBF 1,150,000 hrs

Certifications

• **Safety** UL 60950-1, CAN/CSA-C22.2 No.60950

■ EMC U.S.A.: FCC Part 15 CISPR 22

EU: EN55011, EN61000-6-4 EN55022 Class A, EN61000-3-2/3,

EN55024,

IEC61000-4-2/3/4/5/6/8/11

EN61000-6-2

Ordering Information

• **ADAM-6521** Industrial Ethernet Switch with 4 x 10/100Base-TX

Ports & 1 Multi-mode SC Type Fiber Optic Port

• ADAM-6521/ST Industrial Ethernet Switch with 4 x 10/100Base-TX

Ports & 1 Multi-mode ST Type Fiber Optic Port Industrial Ethernet Switch with 4 x 10/100Base-TX

Ports & 1 Single-mode SC Type Fiber Optic Port

ADAM-6521S

ADAM-6700E

USB to MiniPCle Adaptor Module



Specifications

General

• Certification CE, FCC

• Mounting Wall-Mount, DIN-Rail

• Power Input $10 \sim 30 \text{ V}_{DC}$

• **Power Consumption** Depend on mPCle module; ADAM-6700E supports

maximum 6.6W @ 24 V_{DC}

• Connectors Plug-in screw

terminal block (Power)

Indicators
 LEDs for Power, * Reserve LTE module(Optional)

USB Port Micro-B USB

• Wireless (Optional) Interface: 1x Mini-PCle (Full-size)

Type: Wi-Fi/3G/4G Signal: USB

■ Sim Card Slot 1 x Nano SIM Card slot

Protection

Power Reversal Protection Yes

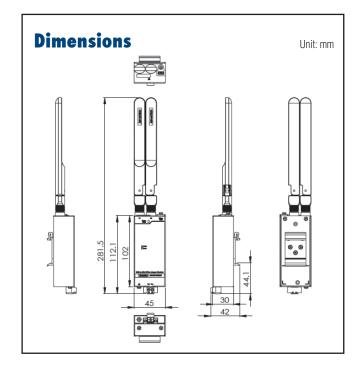
Environment

• Operating Temperature $-20 \, ^{\circ}\text{C} \sim 70 \, ^{\circ}\text{C}$ • Storage Temperature $-40 \, ^{\circ}\text{C} \sim 85 \, ^{\circ}\text{C}$

Operating Humidity
 Storage Humidity
 20 ~ 95% RH (non-condensing)
 0 ~ 95% RH (non-condensing)

Ordering information

ADAM-6700E-A
 USB to MiniPCle Adaptor Module



Accessories

1960094069N001 Wall-mount kit for ADAM-6700E 432C
 96PD-YH3874 USB molding cable, 90Degree

Wi-Fi, LTE-Cat4/3G

Туре	Part Number	Description	Suggestion Cable		Suggestion Antenna	
			Part Number	Qty	Part Number	Qty
Wi-Fi 2.4G	96PD-RYUW131	2.4GHz Wi-Fi Full/Half Size Mini PCle Card	1750006043: 15cm	1	1750008648-01	1
	96PD-RYUW131A1	2.4GHz Wi-Fi Full/Half Size Mini PCle Card (JP)	In the package			
LTE-Cat4/3G	96PD-EC25EFA	Quectel 4G(Cat.4), miniPCIe, Europe, EMEA (Manufacturer P/N: EC25EFA-MINIPCIE)	1750006264: 15cm	1	1750008303-01 1	1
	96PD-EC25JFA	Quectel 4G(Cat.4), miniPCle, JP (Manufacturer P/N: EC25JFA-MINIPCIE)	Local Source			
	96PD-EC20CEFAG	Quectel 4G(Cat.4) R2.1, miniPCle, China (Manufacturer P/N: EC20CEFAG-MINIPCIE) 1	1750006264: 15cm	1	1750008303-01	1
LTE-Cat4 Modem	96PD-MDG100AE0	AMIC 4G.Cat4 Socket Modem(Europe)	1750006264: 15cm	1	1750008303-01	1
	96PD-MDG200AU0	AMIC 4G Cat4 Socket Modem(US)	1750006264: 15cm	1	1750008303-01	1

ADAM-6717 ADAM-6750 ADAM-6760D

Intelligent I/O Gateway with Analog Input

Intelligent I/O Gateway with Digital I/O **Intelligent I/O Gateway with Solid-State Relay Output (for DC)**





Specifications

Analog Input

Channels Sampling Rate

Resolution

Input Range

0 ~ 150mV. 0 ~ 500mV. $0 \sim 1V$, $0 \sim 5V$, $0 \sim 10V$, ±150 mV, ±500 mV, ±1V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20mA

16 bits

8 (differential)

10 or 100 samples/ second

Digital Output

Channels

Sink 30 VDC, 0.1A max. per Output type channel

Digital Input

Channels

Dry contact

logic 0: 0 ~ 3 V_{DC} Wet contact

logic 1: Close to ground logic 1: 10 ~ 30 V_{DC}

logic 0: Open



ADAM-6750

Specifications

Digital Input

Channels

Dry contact

Wet contact

Digital Output

Channels

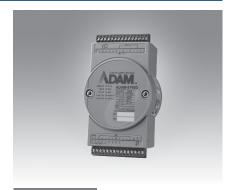
Output type

support 3KHz counter input

logic 0: Open logic 1: Close to ground logic 0: 0 ~ 3 Vpc logic 1: 10 ~ 30 V_{DC}

12 (support 3KHz pulse output)

> Sink 30 V_{DC}, 0.1A max. per channel



ADAM-6760D

Specifications

Digital Input

Channels

support 3KHz counter input Dry contact logic 0: Open

logic 1: Close to ground Wet contact logic 0: 0 ~ 3 V_{DC} logic 1: 10 ~ 30 V_{DC}

Relay Output (PhotoMOS SPST)

Channels 8 (Form A) $30 \, V_{DC}$ Contact rating 1 A @25°C (Resistive and Inductive load) 0.7A @70°C

 Relay-on time 1.3 ms Relay-off time 0.8 ms Insulation 1500Vrms

(Relay output to power)

 Peak Load Current 4A (100ms (1 pulse)) Total Power 400mW / channel

Dissipation

On-state resistance 0.5Ω

Common Specifications

General

0S

- MCU Cortex-A8 32-Bit 1GHz Memory DDR3L 512MB Storage NAND flash 512MB for

system storage microSD Slot (Optional) RT Linux V3.12

Programming Node-RED Linux C Power input $10 \sim 30 V_{DC}$

• Operation temperature $-40 \sim 70^{\circ}$ C

Storage temperature -40 ~ 85°C

Isolation 2500 V_{DC}

Communication

2 x RJ-45 10/100 Mbps LAN port (2MAC ID)

Serial port 2 x RS-485 1 x USB Type-A 2.0, USB port 1 x USB Micro-B 2.0

Ordering information

ADAM-6717-A

Intelligent I/O Gateway with Analog Input

ADAM-6750-A

Intelligent I/O Gateway with Digital I/O

ADAM-6760D-A

Intelligent I/O Gateway with Solid-State Relay Output (for DC)