

I-SAD 19" & I-SAD 19"-S Modular IP Security Access Device



Introduction

The I-SAD 19"-family is a modular telecontrol system that transmits alarm signals, switching operations and telemetry data to a dedicated central network management center via copper or fibre optic lines. The IP network connection can be realized either via Ethernet ports or alternatively via a GPRS (GSM) wireless link.

With its integrated Ethernet switching functionality the I-SAD 19"-S provides VLAN functionality (64 VLAN entries) for more security and better traffic handling.

Several different I/F-modules enable customer to connect various alarm systems, fire detection systems, other sensors or similar devices over parallel inputs and to indicate signalling on parallel outputs. In addition a Temperature and Humidity Sensor (THS) can be ordered.

The built-in RS232 interface of the I-SAD19"-family offers asynchronous access to remote equipment of third-party vendors. The RS232-I/F is accessible via Telnet, which allows real remote access to any installed legacy equipment.

The management of the I-SAD 19"-family is realized by SNMP, integrated WEB Server, Telnet and local CLI (VT100).

The I/O modules offer the opportunity to increase the number of I/O ports. Therefore an Alarm Extender device (AIEx) can be connected to the integrated PDH port (G.703/64k) on the I/O module.

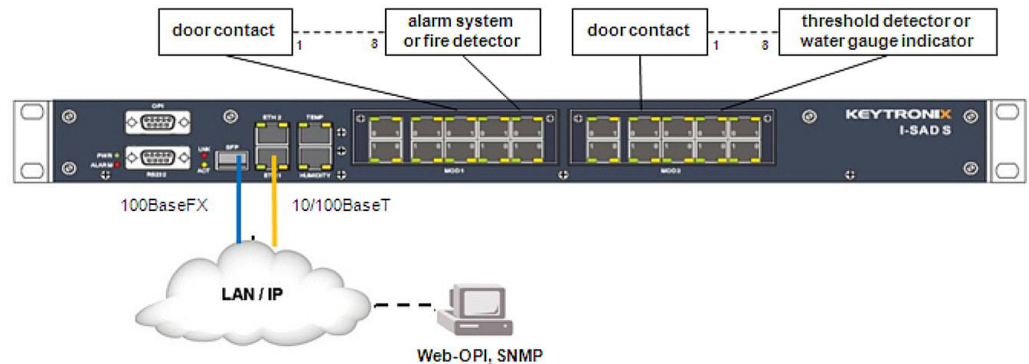
Features

- ▶ 10/100BaseT and 100BaseFX (pluggable SFP) network interfaces
- ▶ Line redundancy via optional GSM/GPRS transmission (when MGSM module equipped)
- ▶ I-SAD 19"-S: integrated Ethernet switch and VLAN support
- ▶ 2 slots for different interface modules
- ▶ Up to 16 parallel I/O ports (with 2 modules I-SAD MI/O)
- ▶ Enables Telnet access to third party equipment via asynchronous RS232 port
- ▶ Management options: SNMP, DHCP client, Web-GUI, Telnet, local CLI/OPI (VT100)
- ▶ Up to 3x destination addresses for SNMP Traps are settable
- ▶ Free editable READ/WRITE communities
- ▶ Integrated wide range power supply (48 V DC ... 230 V AC)
- ▶ Form factor: EIA 19", 1RU
- ▶ Temperature Sensor and Humidity Sensor (THS) available
- ▶ To increase number of I/O ports connecting Alarm Extender (AIEx) to PDH port of I/O module (Integrated line and device monitoring local I-SAD 19" and remote AIEx)

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Application Example

I-SAD 19"-family enables a remote control center to manage and supervise different sensors, contacts and switches.



Specifications

Network I/F (LAN)

- I-SAD 19":
 - 2x 10/100BaseTx
 - Connector: RJ45
- I-SAD 19"-S:
 - 2x 10/100BaseTx (RJ45)
 - 1x 100BaseFX:
 - Line code: 4B/5B
 - Pluggable SFP types
 - Connector: SFP
 - Ethernet Switch:
 - Up to 1024 MAC addresses
 - MTU: 1522 bytes
 - VLAN according to 802.1p/q
 - Max. 64 different VLAN entries
 - VLAN-ID: 0 - 4095

Service I/F

- Temperature I/F (for specific equipment)
 - top and bottom threshold settable; analog indication (temp. range: -20...+80°C)
 - Connector: RJ45
- Humidity I/F (for specific equipment)
 - top and bottom threshold settable; analog indication
 - Connector: RJ45

Other Service Modules according to the following overview (page 3 and 4)

Management

- SNMP, integrated WEB OPI, Telnet
- Settable up to 3x destination addresses for SNMP Traps
- Free editable READ/WRITE communities (Trap names)
- DHCP client
- CLI/OPI (local management I/F)
 - Asynchronous RS232
 - Transfer rate: 115k2/8/N/1 (default)
 - Connector: D-Sub9 (female)
- RS232 I/F (connecting third-party system)
 - Asynchronous RS232
 - Transfer rate: 9,6...115,2 kbps, parity and stop bit (default: 9k6/8/N/1)
 - Connector: D-Sub9 (female)
 - Port specific IP address settable
 - Access to third-party systems via Telnet

Environmental

- Operation: -20 °C to + 70 °C
- Storage: -20 °C to + 70 °C
- Humidity: max. 80%, non-condensing

Power

- 48 VDC - 230 VAC (wide range)
- Protection class I

Physical

- Weight: 2,0kg
- Dimensions: 440 (W)x 45 (H)x 205 (D) mm
- Form factor: EIA 19", 1RU

I-SAD 19" & I-SAD 19"-S Modular IP Security Access Device

I-SAD MI/O – Specification

- I/O ports
 - 8x parallel loop controlled Inputs (non-potential-free)
 - 8x parallel bistable Output (potential-free)
 - Allow switching of extra low voltage circuit signals only (accord. to EN 60950: SELV circuit)
 - Connector: 8x RJ45 (Pin 1,2-Input; Pin 6,7,8-Output)
- Alarm contact
 - 2x parallel Outputs (potential-free)
 - Connector: 1x RJ45 (Pin 1,2-local alarm, Pin 7,8-remote alarm)
- 1x PDH port
 - Standard: ITU-T G.703
 - Data rate: 64 kbps, codirectional
 - Impedance: 120 Ohm
 - Connector: 1x RJ45



I-SAD MI/O D-Sub – Specification

- I/O ports
 - 8x parallel loop controlled Inputs (non-potential-free)
 - 4x parallel bistable Output (potential-free)
 - Allow switching of extra low voltage circuit signals only (accord. to EN 60950: SELV circuit)
- Alarm contacts
 - 2x parallel Outputs (potential-free)
- PDH port
 - Standard: ITU-T G.703
 - Data rate: 64 kbps, codirectional
 - Impedance: 120 Ohm
- 24V Output for peripherals (max. 40mA)
- Common Connector: D-Sub37 (female)



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I-SAD MCC (Cabinet Control) – Specification

- 2x door lock sensor ports
 - 24V (100mA) for door lock sensors
 - “Unlock-duration” and “Unlock-timeout” are settable
- 2x entry sensor ports (position of door opener - open/closed)
- Connector: 4x RJ45
- For vendor specific peripherals only!

External peripherals can be connected via RJ12 connectors



I-SAD Temperature Sensor (TS)– Specification

- Temperature range: -20°C ... +70°C
- Resistance value: 10 kOhm (25°C ± 3 %)
- Connecting cable length: max. 2 metres
- Cable type: 1:1 patch cable RJ45
- For usage on I-SAD “TEMP” port only
- Connector: 4x RJ45
- Environmental
 - Operation: -20°C ... +70°C
 - Storage: -20°C ... +70°C
 - Humidity: max. 80%, non-condensing
- Dimensions: 55,2(W) x 25,1(H) x 30,0(D) mm



I-SAD Humidity Sensor (HS) – Specification

- Humidity range: 10% ... 90% (20°C ± 5 %)
- Connecting cable length: max. 2 metres
- Cable type: 1:1 patch cable RJ45
- For usage on I-SAD “HUMIDITY” port only
- Connector: 4x RJ45
- Environmental
 - Operation: -20°C ... +70°C
 - Storage: -20°C ... +70°C
 - Humidity: max. 80%, non-condensing
- Dimensions: 55,2(W) x 25,1(H) x 30,0(D) mm



Specification may change without prior notice. Please refer to www.arcutronix.com for latest data-sheets.

For more information please contact arcutronix GmbH or visit us at www.arcutronix.com.

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