

Product Data Sheet

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General Description



The **SC-DAD** is a compact smart data collection device, it can collect and treat data coming from sensors, tools, devices with output signal such as:

- Analog Signals
- Digital Signals
- Serial Ports (RS232/RS485)
- Ethernet

The user friendly web based configuration software make the device extremely easy to configure in just few minutes.

The **SC-DAD** is not just a data collection device, it can add features to tools, devices and instruments with custom hardware and software solutions.

The device can be also equipped with other hardware including touchscreen display to satisfy any kind of applications.

Applications

- Data collection and data treatment.
- Add features to tools, devices, instruments.
- Sensor integration (protocol integrator).
- Industrial process control.
- Laboratory instrument (signal measurement).

General Hardware details

Atmel ARM9 400Mhz CPU	◆ Fanless reliable CPU
Up to 16GB of flash memory	◆ Ideal for data storage applications
Linux Embedded support	◆ High software capability
Two USB 2.0 host ports (12 Mbits)	◆ Additional hardware support
One Ethernet 10/100 port	◆ Fast and secure connection
Real Time Clock with on-board	◆ backup battery included
2 x COM Port RS232 or RS285	◆ 1KV Galvanic Insulation (40Vac rms continuous) ◆ Asynchronous type ◆ Baudrate up to 115200
Dimension L – W – H	◆ 235 – 160 – 110 mm
Power	◆ 5Vdc 2A max 110Vac 60Hz / 220Vac 50Hz

Analog/Digital inputs details

Up to 16 Analog and Digital inputs	◆ Professional header connectors
Resolution	◆ 12 BIT ADC
Integral non linearity	◆ +/- 2 LSB ADC
Input Impedance	◆ >1.5M Ohm (+/- 10 Voltage inputs) ◆ >300K Ohm (+/- 2 Voltage inputs) ◆ 100 Ohm (Current inputs)
Signal ranges	◆ +/- 2 V dc ◆ +/- 10 V dc ◆ +/- 20 mA dc ◆ 5-20 V digital inputs (4,5V Threshold)
Galvanic Insulation	◆ 1KVdc for each channel
Input protection	◆ UP to 300 Vdc
Pluggable headers connectors	◆ Fast and easy wiring

Software features

Operative System	<ul style="list-style-type: none"> ◆ Linux Debian 6.0 embedded version
Web server based configuration software	<ul style="list-style-type: none"> ◆ Easy and fast configuration by web browser ◆ No additional software required
Web values viewer	<ul style="list-style-type: none"> ◆ Real time value monitor by web browser
COM port driver system	<ul style="list-style-type: none"> ◆ Easy driver installation system
Drivers features	<ul style="list-style-type: none"> ◆ Data acquisition from devices ◆ Devices control
Modbus on TCP/IP protocol	<ul style="list-style-type: none"> ◆ Compatible with standard Modbus on TCP/IP clients ◆ Fast data collection ◆ XML based auto configuration system (.SIC files generation)
USB Wifi Adapter support	<ul style="list-style-type: none"> ◆ Wifi connection speed UP to 54Mbit ◆ All encryption methods are supported
Plug-In system	<ul style="list-style-type: none"> ◆ Add features to the SC-DAD ◆ Data treatment ◆ Add new protocols for data exchange
Easy Backup/Restore system	<ul style="list-style-type: none"> ◆ Save and restore the device configuration in just few minutes
Easy upgrade system	<ul style="list-style-type: none"> ◆ Upgrade the device software ◆ Install drivers and plug-in

