

ScanaQuad Logic Analyzer and Signal Generator

ScanaQuad series of logic analyzers and signals generators are 4 channel, USB powered devices that allow you to capture signals, visualize and analyze them on a host computer software, and generate signals. Generated signals may be arbitrarily created signals, or alternatively, user may play back previously captured signals.

ScanaQuad offers an intuitive way of analyzing logic signals, backed with exciting features like enhanced $\pm 35V$ input protection, adjustable input threshold, direct connection to RS232/485, CAN and LIN buses, ability to trigger on specific protocols (like a UART word or an I2C address). The signal generator end was designed to be very versatile: Precise control over loop point can be achieved as well as the ability to generate arbitrary signals on any number of channels while recording the result on the others. ScanaQuad input/output stage is fully protected while offering flexible options like Open Drain outputs and configurable pull up/down resistors. Furthermore, the digital signal generator has an adjustable output voltage from 1.6V to 5V, which covers most TTL, CMOS and LVCMOS applications.



Hardware Features highlight

- 4 channels configurable as input or outputs
- Up to 200MHz Sampling frequency
- Up to 4M Points memory per channel
- Adjustable input threshold from 0.5V \rightarrow 3V
- Input protection up to $\pm 35V$
- 2 configurable differential input pairs
- Adjustable digital output voltage level 1.8V \rightarrow 5V
- Optional pull up/down resistors on all probes
- Outputs can be configured as open-drain

Package content

- ScanaQuad device
- USB cable
- 5 pins gripper probes cables

System requirements

- A free USB port. (compatible with USB1 & USB2)
- Windows, Linux or Mac OS X operating system (check ScanaStudio software compatibility on www.ikallogic.com)

Getting Started

- Download and install last version of ScanaStudio software from www.ikallogic.com
- Connect the device to your host computer via the provided USB cable and wait until the driver is installed
- Connect the probes to the device (the black cable must coincide with the GND symbol).
- Start ScanaStudio software to start capturing and analyzing signals.



ScanaQuad family description

ScanaQuad SQ25



- 25 MSPS @ 4 channels
- 256K points / channel
- Digital Signal generator
- $\pm 12V$ input protection
- Trigger: Rising, falling, level, pulse width

ScanaQuad SQ50



- 50 MSPS @ 4 channels
- 1M points / channel
- Digital Signal generator
- $\pm 12V$ input protection
- Trigger: Rising, falling, level, pulse width, serial protocol
- Variable output voltage
- Threshold: 0.5V \rightarrow 3V

ScanaQuad SQ100



- 100 MSPS @ 4 channels
- 2M points / channel
- Digital Signal generator
- $\pm 35V$ input protection
- Trigger: Rising, falling, level, pulse width, serial protocol
- Variable output voltage
- Threshold: 0.5V \rightarrow 3V
- Variable input resistance
- Open Drain outputs
- Optional pull up/down
- Differential pairs: 1

ScanaQuad SQ200



- 200 MSPS @ 4 channels
- 4M points / channel
- Digital Signal generator
- $\pm 35V$ input protection
- Trigger: Rising, falling, level, pulse width, serial protocol
- Variable output voltage
- Threshold: 0.5V \rightarrow 3V
- Variable input resistance
- Open Drain outputs
- Optional pull up/down
- Differential pairs: 2

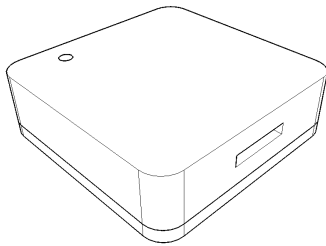
Input / output stage specifications

Value	Description	Min.	Typ.	Max.	Unit
Ri_100K	Input resistance on any channel in input mode and configured as 100K Ω . Test conditions: input voltage ranging from 0V to 5V. Target VCC configured to 5V.	99K	100K	101K	Ω
Ri_1M ¹	Input resistance on any channel in input mode and configured as 1M Ω . Test conditions: input voltage ranging from 0V to 5V. Target VCC configured to 5V.	0.99M	1M	1.01M	Ω
Vin	Maximum input voltage for SQ25 and SQ50			± 12	V
Vin	Maximum input voltage for SQ100 and SQ200			± 35	V
Ic	Input clamp current			± 50	mA
Rpu ²	Optional pull-up resistor value		10K		Ω

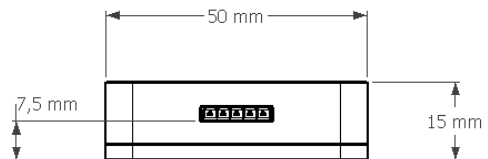
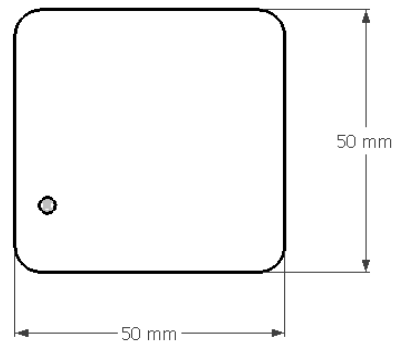
¹ N/A for SQ25 devices.

² N/A for SQ25 and SQ50.

Dimensions & weight



Weight (without probes or USB cable): **80gm (±10gm)**



Warranty & Certifications

3 Years
WARANTY



This device is sold with a warranty of 3 years starting from the selling date. In case of any malfunction, contact customer support at www.ikalogic.com immediately and provide the device serial number and/or purchase invoice.

RoHS Compliant 2011/65/EC. This device does not contain any of the substances in excess of the maximum concentration values ("MCVs") defined in the EU RoHS Directive.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with the following applicable European Directives: Electromagnetic Compatibility (EMC) Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC, IEC61326-2.

CAN ICES-3 (B) / NMB-3 (B)

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Ikalogic could void the user's authority to operate the equipment.

