



IKALOGIC

SP259 Series summary and safety notes

SP259 and SP259i 9 channels, 200 MSPS logic analyzer with industrial inputs option

www.ikalogic.com | support@ikalogic.com

August 31, 2023

Contents

Detailed device manual	3
Product description	4
Warning	5
SP259(i) interfaces	6
Power requirements	6
Getting started	6
Safety information	7
Symbols definitions	7
Important safety notes	7
Limited warranty & limitation of liability	8
Document Revisions	9

Detailed device manual

This document only contains summary of the specifications and important safety information. Please refer to the full user manual for detailed device characteristics and most up to date information regarding the usage of this product.

Latest user manual can be found on www.ikalogic.com

We also encourage you to read the knowledge base section on our website.

Product description

SP259 series logic analyzers and protocol decoders offer in depth analysis of logic signals and protocols with 250MHz (4ns) timing resolution. 9-channel operation allows 8-bit parallel data to be captured along with a clock or strobe signal. Below are the main characteristics of SP259(i) logic analyzer:

- 250 MHz sampling rate, with all 9 channels used.
- 1 Gb embedded memory
- Schmitt trigger input stages with adjustable thresholds
- External clock option (state mode), up to 62.5MHz
- Precise trigger-In and trigger-Out signals on SMA ports

SP259 Series is composed of two devices, SP259 and SP259i. Both offer 9 logic inputs, but SP259i integrates industrial receivers for CAN, LIN, RS232 and RS485 buses.¹



Figure 1: SP259 Logic Analyzer



Figure 2: SP259i logic analyzer (industrial version)

¹Industrial receivers in the SP259i are multiplexed with one or more of the existing 9 logic channels

Warning

Read **safety information** section carefully before using this instrument.

SP259(i) interfaces

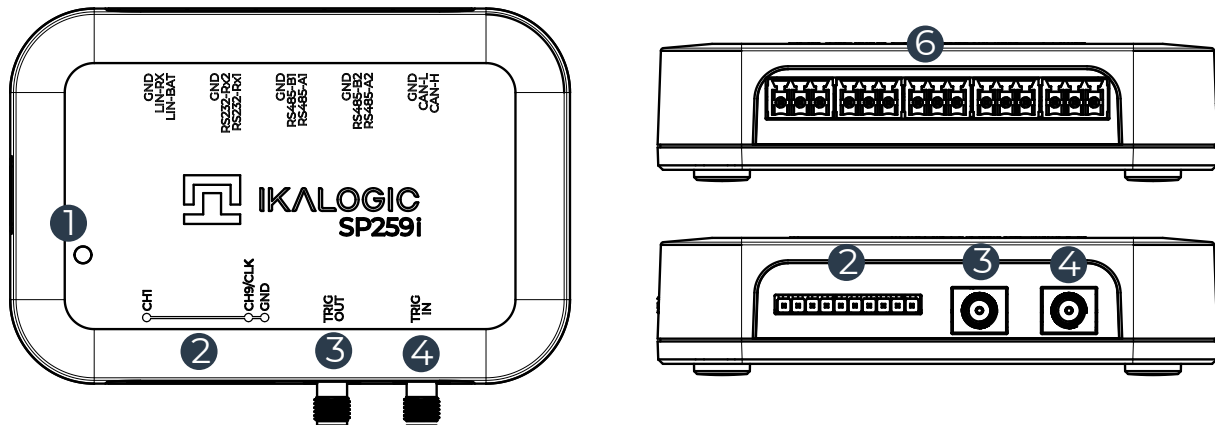


Figure 3: SP259i ports and interfaces

1. Status LED
2. 9-CH logic probes input
3. Trigger OUT SMA connector
4. Trigger IN SMA connector
5. USB 3.0 (micro-B) port.
6. Industrial port ²

Power requirements

- Input power connector: Micro USB 3.0 female
- Input current: 200 mA
- Input voltage: 5 V \pm 0.5 V

Getting started

To use this device, please download and install the latest version of ScanaStudio software from www.ikalogic.com. Please download and read latest datasheet from website. Contact Ikalogic customer support (support@ikalogic.com) if you have any questions regarding the usage of this product.

²Only on SP259i (industrial) version.

Safety information

This product complies with safety standards IEC NF/EN 61010-1: 2010, IEC NF/EN 61010-2-030 and UL 61010-1: 2015 To prevent possible electrical shock, fire, personal injury, or damage to the product, read all safety information before you use the product. The following international symbols are used on the product and in this manual.

Symbols definitions



Figure 4: Risk of Danger. Important information. See Manual.



Figure 5: WEEE logo. This product complies with the WEEE Directive (2002/96/EC) marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 Do not dispose of this product as unsorted municipal waste.



Figure 6: CE Logo. Conforms to European Union directives.

Important safety notes



Warning, to avoid electrical shock or fire:

- Carefully read all instructions.
- Use the product only as specified, otherwise the protection supplied by the product can be compromised.

- Do not use the product if it operates incorrectly.
- Before use, inspect device casing, probes, test leads and accessories for mechanical damage and replace if damaged.
- Never attempt to repair a defective device. Contact after-sale service.
- Do not use the product or its accessories in case of any damage.
- Remove all probes, test leads and accessories that are not in use.
- Never use the device for measuring mains circuits.
- Never use the device for measuring circuits which are not isolated from mains.
- Do not touch electrical wires with bare hands.
- Keep away from children's sight or from animals.
- Do not expose to water, heat or moisture.
- The device's ground connection through the USB cable is for measurement purposes only. The logic analyzer does not have a protective safety ground.
- Ensure there is no significant voltage between device ground and the point to which you intend to connect it.
- Do not apply more than the rated voltage ($\pm 25V$), between the terminals or between each terminal and ground.
- Do not apply input voltages above the rating of the instrument ($\pm 25V$).
- Measure a known voltage first to make sure that the product operates correctly.
- Do not work alone.
- Comply with local and national safety codes. Use personal protective equipment (approved rubber gloves, face protection, and flame resistant clothes) to prevent shock.
- Do not use the device in wet or damp conditions, or around explosive gas or vapor.
- Do not operate the product with covers removed or the case open. Hazardous voltage exposure is possible.
- Do not use in a system in which the failure of the product might result in personal injury.

Limited warranty & limitation of liability

Each Ikalogic product is warranted to be free from defects in material and workmanship under normal use and service. The warranty period is three years for the test tool and two year for its accessories. This warranty extends only to the original buyer or end-user customer of an Ikalogic authorized reseller, and does not apply to fuses, disposable batteries or to any product which, in Ikalogic's opinion, has been misused, altered, neglected or damaged by accident or abnormal conditions of operation or handling.

THIS WARRANTY IS BUYER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES,

EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IKALOGIC SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, WHETHER ARISING FROM BREACH OF WARRANTY OR BASED ON CONTRACT, TORT, RELIANCE OR ANY OTHER THEORY. Since some countries or states do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. If any provision of this Warranty is held invalid or unenforceable by a court of competent jurisdiction, such holding will not affect the validity or enforceability of any other provision.

Document Revisions

30-July-2019	Updated safety information section Removed redundant information that is found in user manual Added Limited warranty & limitation of liability section
10-October-2018	Initial release of this document.

The information in this document is subject to change without notice.