



USB Powered Portable Sensor Checker
SA1P



Portable Sensor Checker

Easily connects 24V DC devices at any location

IDEC CORPORATION

Compact & lightweight (95g). Ideal for on-site use



Issue

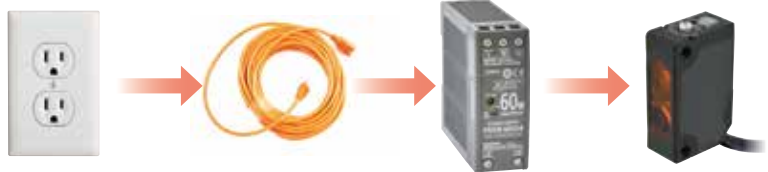
How can I test 24VDC devices on my machine?

The old way of using cell batteries or power supplies connected to outlets using extension cords are required.

Without AC power supply



With AC power supply



Have you ever had this experience?

When testing operation of sensors and indicator lights on-site, as there are no power outlets nearby, it takes a lot of time and effort to route the cords from the control panel.



Solution

USB Powered Portable Sensor Checker

SA1P

The SA1P uses an external USB battery for power

Because cell batteries are not required, cost can be reduced and used for a long period of time. The mobile battery can be fastened using a belt for making it convenient to carry around.

Connects to PCs using a USB connector (*2)

*1) Connect to a mobile battery of 5V DC, 2A output min.

*2) When connecting a USB connector from a PC, load conditions differ depending on ratings. See the instruction manual for details.



Tests and continuity checks can be performed in any location

Easy device testing and continuity check for 24V DC devices without power outlets near by.



Push-in terminal allows easy wiring. Connect up to 2 devices simultaneously.



Sensor operation check



Operation check of pressure-sensitive switches such as edge switches

E30BK1 (*1)

*1) Available August 2021

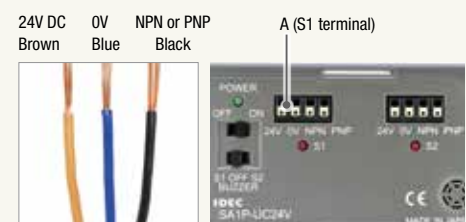


Operation check of illuminated buzzers

HW1Z

Example: Connecting 3-wire sensors

1. Insert each wire by pressing part A (white terminal).
2. Turn on the POWER switch.
3. When the output signal is received from the sensor, the signal input indicator (red) turns on. To make the buzzer sound at the same time, turn on the BUZZER.
(Two terminal parts are available so that two sensors can be connected)



General Specifications

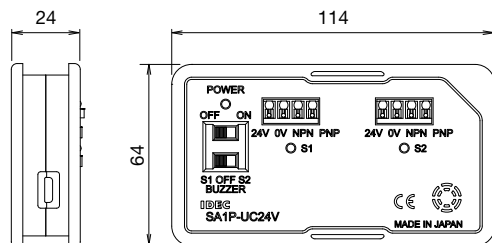
Electrical specifications	Power supply	Connectors	USB Type-C connector (USB2.0 Type-A conversion cable on main unit) *1
	USB power rating		5V DC, 2A maximum
	Input current		Max. load current: 1.8A (buzzer ON), 1.5A (buzzer OFF) No Load: 0.2A
	Sensor connection	Connectors	Terminal S1, S2 (push-in terminal)
		External output (for sensor power)	24V DC±10% 200mA max. (Total of S1 and S2)
		Points	2 points
		Connection*2	NPN: Connect to 24V NPN open collector output. PNP: Connect to 24V PNP open collector output.
		Signal input (connected to sensor output)	NPN: Buzzer output ON: 25mA (peak current 50mA)/point Buzzer output OFF: 2mA/point PNP: Buzzer output ON: 2mA/point Buzzer output OFF: 2mA/point
		Input current	
		Min. input time	0.5s
	Buzzer output		1 point (S1/S2/OFF selectable)
	Slide switches		POWER Switch (ON-OFF) Buzzer Switch (S1-OFF-S2)
Environmental specifications	Indicator		POWER indicator (Green) Signal input indicator S1 side (Red) Signal input indicator S2 side (Red)
	Operating temperature		-10 to +50°C (no freezing)
	Relative humidity		30 to 85%RH (no condensation)
	Storage temperature		-25 to +70°C (no freezing)
	EMC Resistance		IEC/EN61000-6-2, IEC/EN61000-6-4

*1) We recommend you to use the USB cable supplied with the product. If a commercially available USB cable is used, be sure to keep the cable length short in consideration of the voltage drop caused by the current flowing through the USB cable. Note that operation of commercially available USB cables are not guaranteed.

*2) Although a proximity switch, a switch or other devices with contacts can be connected, a DC 2-wire type sensor with built-in power supply cannot be connected.

Dimensions

Dimensions in mm



Part No.

Main part

Package quantity:1

Name	Part No. (Ordering No.)
SA1P	SA1P-UC24V

Attachments (included with Part No.)

Package quantity:1

Name / Shape	Descriptions
Fastening belt	Belt to fasten the USB cable or mobile battery. Black, length: 0.3m, width: 20mm, thickness: 1mm
USB cable	Cable used to connect the SA1P and the power supply. Connector (main unit side): USB Type C Connector (power supply side): USB Type A Length: 0.25m
Strap	Prevents the SA1P from dropping.

Instructions

Be sure to read the instruction sheet before installation, wiring, operation, and maintenance of the product.

For details on installation, wiring, and maintenance, see the Instruction Sheet and User's Manual from the URL below.

SA1P <https://product.idec.com/?product=SA1P>



Product Information

Miniature Photoelectric Switches

SA2E



Achieves stable detection even at a fast response time of 0.5ms. Equipped with light ON/dark ON features, on-site switching of light ON/dark ON is possible, enabling stock reduction. Three detection distances (1000, 500, 100m) available for diffuse-reflective sensors allowing a flexible installation location.

Photoelectric Switches

SA1U



Universal voltage types operate on 24-240V AC and 12-240V DC. DC power types operate on 12-24V DC. Four sensing methods (through-beam, polarized retrorefl active, diffuse-refl active, and background suppression).

Magnetic Proximity Switches

DPRI



The DPRI magnetic proximity switch incorporates a sealed reed switch and four magnets inside a compact housing. This self-contained proximity switch requires no external power supply and can detect the presence of magnetic objects without contact.

IDEC CORPORATION

Head Office

6-64, Nishi-Miyahara-2-Chome, Yodogawa-ku, Osaka 532-0004, Japan

USA	IDEC Corporation	Tel: +1-408-747-0550	opencontact@idec.com
Germany	APEM GmbH	Tel: +49-40-25 30 54-0	service@eu.idec.com
Singapore	IDEC Izumi Asia Pte. Ltd.	Tel: +65-6746-1155	info@sg.idec.com
Thailand	IDEC Asia (Thailand) Co., Ltd.	Tel: +66-2-392-9765	sales@th.idec.com
India	IDEC Controls India Private Limited	Tel: +91-80679-35328	info_india@idec.com
Taiwan	IDEC Taiwan Corporation	Tel: +886-2-2577-6938	service@tw.idec.com

Hong Kong	IDEC Izumi (H.K.) Co., Ltd.	Tel: +852-2803-8989	info@hk.idec.com
China	IDEC (Shanghai) Corporation	Tel: +86-21-6135-1515	idec@cn.idec.com
	Beijing Branch	Tel: +86-10-6581-6131	idec@cn.idec.com
	Guangzhou Branch	Tel: +86-20-8362-2394	idec@cn.idec.com
Japan	IDEC Corporation	Tel: +81-6-6398-2527	jp_marketing@idec.com

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