

Digimatic Indicators

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

ABSOLUTE Solar-Powered Digimatic Indicator ID-SS SERIES 543

- Solar powered
An environmentally friendly measuring instrument that does not require batteries, eliminating the hassle and cost of battery replacement. Can operate down to a minimum light level of 40 lux – lower than the level in a warehouse.
- Built-in recharger
The large-capacity built-in reservoir capacitor allows you to use the indicator for long periods of time under light conditions below the minimum level.
- User-friendly buttons
All functions can be accessed by using the two or three large buttons on the front of the indicator.
- Origin recorded even if display disappears.
The indicator includes an ABS (absolute) scale that allows the previously set origin to be restored even if the display disappears due to insufficient light, making it easy to resume measurement. This feature makes ID-SS ideal for long-time or multi-point measurement.
- Equipped with a data output port that enables incorporation into measurement networking and statistical process control systems (refer to page A-3).

MeasurLink ENABLED
Data Management Software by Mitutoyo



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Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

ABSOLUTE™



An inspection certificate is supplied as standard. Refer to page U-11 for details.

Technical Data

- Display: 6-digit LCD, sign
- Measuring force: 1.5 N or less
- Usable orientations: All
- Power supply: Solar battery (for indoor use)
- Minimum Operating light: 40 lux
Note: A built-in reservoir capacitor allows a fully charged ID-SS to be used for about 3.5 hours under light illumination below the minimum level. The charging time differs depending on the environment, but it usually takes about 1.5 hours for a fully discharged ID-SS to fully recharge under light conditions of 500 lux.
- Maximum response speed: No limit (scan-type measurement is not supported)

Functions

- Origin set (Zero-setting)
- Direction switching
- Data output
- Error alarm display

SPECIFICATIONS

ISO/JIS type ASME/ANSI/AGD type

Order No.	Range (mm)	Resolution (mm)	Accuracy*1 (mm)			Back type
			Overall*2	Hysteresis	Repeatability	
543-500	12.7	0.001	0.003	0.002	0.002	With lug
543-500B						Flat
543-505		0.01	0.02	0.02	0.01	With lug
543-505B						Flat

Order No.	Range	Resolution	Accuracy*1			Back type
			Overall*2	Hysteresis	Repeatability	
543-501	0.5 in/12.7 mm	0.00005 in /0.001 mm	±0.0001 in /0.003 mm	0.0001 in /0.002 mm	0.0001 in /0.002 mm	With lug
543-501B						Flat
543-502						With lug
543-502B						Flat
543-506		0.0005 in /0.01 mm	±0.0010 in /0.02 mm	0.0010 in /0.02 mm	0.005 in /0.01 mm	With lug
543-506B						Flat
543-507						With lug
543-507B						Flat

*1 These values apply at 20 °C, and quantizing error of ±1 count is excluded.

*2 Overall magnification and linearity.

Note: Regarding origin setting, refer to "Origin Setting of Digimatic Indicators" on page F-25.

Optional Accessories

Lifting lever



Lifting knob



Lifting cable



- Lifting
 - Lifting lever **21EZA198** (ISO/JIS/DIN Type), **21EZA199** (ASME/ANSI/AGD Type)
 - Lifting knob **21EZA105** (ISO/JIS/DIN Type), **21EZA150** (ASME/ANSI/AGD Type)
 - Lifting cable **540774**
- SPC Cable:
 - 905338** (1 m)
 - 905409** (2 m)
- USB Input Tool Direct (2 m): **06AFM380F**
 Note: Please separately purchase **USB-ITPAK** since there is no data output switch on the measurement instrument.
 Refer to pages A-13, A-20 to A-22 for details.
- Input Tool Series
 - IT-016U** (USB Keyboard Signal Conversion Type): **264-016-10**
 - IT-007R** (RS-232C Communication Conversion Type): **264-007**
 Refer to page F-66 for details.
- Connecting Cables for **U-WAVE-T** (160 mm): **02AZD790F**
 For foot switch: **02AZE140F**
 Refer to page F-66 for details.
- Digimatic Mini-Processor **DP-1VA LOGGER: 264-505**
- Contact points for Mitutoyo's dial indicators (Refer to pages F-57 to F-60 for details.)
- Interchangeable backs for 2 series (Refer to page F-61 for details.)
- Measuring stands (Refer to pages F-84 to F-92 for details.)
- **ID-SS** can be used in standard work environments.
 The following is excerpted from JIS Z9110: 2010 General rules of recommended lighting levels; 5.4 Factories:

Luminance (lux)	Location (permissible work)
1500	Very detailed visual work
750	Detailed visual work; design and drawing work
500	Regular visual work such as work carried out in a factory; monitoring work such as using instrument panels and control panels
300	Administrative work carried out in a warehouse
200	Control rooms, bathrooms, and places where manual light work is carried out
150	Work such as loading, unloading, and shifting loads
100	Hallways, corridors, entrances and exits, and warehouses
50	Indoor emergency staircases

Dimensions

