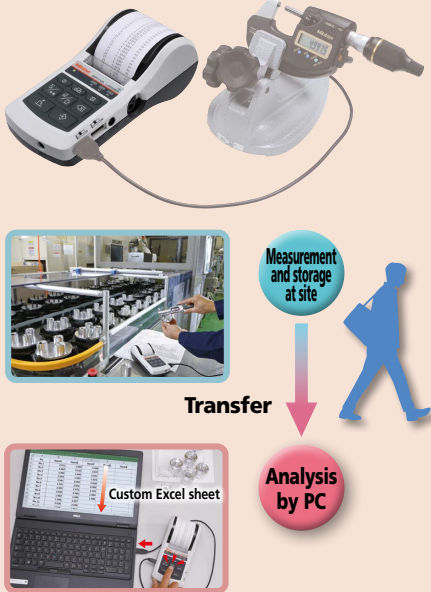


Mini-Printer Equipped with Data Logging Function SERIES 264 — Digimatic Mini-Processor DP-1VA LOGGER

Typical application



• This is a palm-sized printer used to print measurement data from Digimatic gages or to perform statistical analysis.

• The versatile **DP-1VA LOGGER** printer not only prints measurement data, but performs a variety of statistical analyses, draws histograms and D-charts and also performs complex operations on Xbar-R control charts.

• The data logger function allows storage of up to 1,000 pieces of data in memory and batch transfer of stored data to an Excel-format inspection certificate, etc., by connecting to a PC via a USB cable (optional).



Easy-to-see pictogram display



264-506
DP-1VA LOGGER

SPECIFICATIONS

Code No.	264-506*
Model	DP-1VA LOGGER
Data input	Digimatic input, RS-232C input (specific to Mitutoyo KA counter)
Data processing capacity	Mode 0: 100,000 pcs. of data Modes 1, 2: 9,999 pcs. of data Mode 3: Sample size 10x9,999 subgroups=99,990 pcs. of data
GO/±NG judgment	Five sets can be defined
Output	1) USB output 2) RS-232C data output at TTL levels 3) GO/±NG judgment result output (+NG, GO, -NG)
Input timer	Input intervals: 0.25 s, 1 s, 5 s, 30 s, 1 min, 30 min, 60 min
Printing method	Thermal line printer
Printing speed	0.8 s per line (6.5 mm/s) (using AC adapter)
Printing line	10,000 lines of normal characters per roll 7,000 lines of large characters per roll
Printing paper	High durability thermo-sensitive paper, Width 58 mm x length 48 m Note: If it is to be used for official documents, or stored more than 5 years, it is recommended to make a more durable copy.
Power source	2 power methods 1) AC adapter 100 to 240 V 50/60 Hz AC adapter (6 V, 2 A) as a standard accessory. 06AGZ369JA (JAPAN, US), 06AGZ369D (EU), 06AGZ369E (UK), 06AGZ369K (Korea), 06AGZ369DC (China) 2) 4 pcs. of LR6/AA size (alkaline or Ni-Mh) Note: Manganese dioxide batteries are not usable.
Battery life	About 10,000 lines* (if data is printed once every 5 seconds using 1,600 mA NiMH batteries at 20 °C) * This is a typical value and is not guaranteed.
External dimensions	94 (W) x201 (D) x75.2 (H) mm
Mass	390 g (main unit)
Optional Accessories	1) USB cable (A-microB) : 06AFZ050 (1 m) 2) RS-232C output cable: 09EAA084 (1 m, D-SUB 9-pin) 3) RS-232C counter cable: 09EAA094 Cable for KA counter (1 m, D-SUB 25-pin) 4) GO/±NG judgment cable: 965516 (2 m, 10 pin terminal/separate) 5) Foot switch: 937179T
Consumable Items	Printing paper (10 rolls): 09EAA082

* To denote your AC line voltage add the following suffixes. **A** for North America, **D** for Europe, **E** for UK, **K** for Korea, **DC** for China, and no suffix is required for Japan.

Example of printout

MODE1	MODE2	MODE3
<pre> LIMIT DATA 14 LSL 19.11 mm USL 21.50 mm VOL 1.00 mm 1 20.14 mm 2 20.16 mm 3 19.86 mm 4 20.27 mm 5 20.27 mm 6 19.31 mm 7 19.84 mm 8 19.83 mm 9 19.80 mm 10 19.86 mm 11 19.86 mm 12 20.00 mm PART NO.: DATE 2018/ 2/15 TIME 12: 8 NAME: RESULT * MAX 21.06 mm MIN 19.89 mm R 0.1665 mm σn 0.4521 mm σn-1 0.4578 mm NG 1 ±NG 1 AMP 0.669 % CP 0.818 % HISTOGRAM LSL 19.11 mm USL 21.50 mm VOL 1.00 mm DIV 1 NG 1 AMP 1 CP 1 </pre>	<pre> LIMIT MODE* LIMIT DATA 14 LSL 19.11 mm USL 21.50 mm VOL 1.00 mm LIMIT2 26.27 mm NEW LIMIT DATA* LIMIT DATA 14 DATE 2018/ 2/17 TIME 14:39 LSL 27.22 mm USL 29.27 mm VOL 1.00 mm PART NO.: DATE 2018/ 2/17 TIME 14:39 NAME: SUB GR. NO. 1 27.87mm 2 27.87mm 3 27.87mm 4 27.87mm 5 27.87mm 6 27.87mm 7 27.87mm 8 27.87mm 9 27.87mm 10 27.87mm 11 27.87mm 12 27.87mm PART NO.: DATE 2018/ 2/17 TIME 14:39 NAME: CONTROL LIMIT* DATE 2018/ 2/17 TIME 14:39 NO. OF SUB GR. 2 SAMPLE SIZE R-UCL 27.0407 mm R-LCL 26.5209 mm X-UCL 27.87 mm X-LCL 26.5251 mm R 0.2549 mm </pre>	<pre> SUB GR. NO. 1 28.33 mm 2 28.27 mm 3 28.62 mm 4 29.70 mm 5 27.41 mm 6 28.84 mm 7 28.57 mm 8 28.96 mm 9 27.92 mm 10 27.92 mm 11 27.92 mm 12 27.92 mm PART NO.: DATE 2018/ 2/17 TIME 14:40 NAME: SUB GR. NO. 1 27.77 mm 2 27.77 mm 3 27.88 mm 4 27.84 mm 5 27.80 mm 6 28.80 mm 7 28.85 mm 8 27.7329 mm 9 27.7329 mm 10 27.7329 mm PART NO.: DATE 2018/ 2/17 TIME 14:40 NAME: CONTROL LIMIT* DATE 2018/ 2/17 TIME 14:40 NO. OF SUB GR. 2 SAMPLE SIZE R-UCL 27.0407 mm R-LCL 26.5209 mm X-UCL 27.87 mm X-LCL 26.5251 mm R 0.2549 mm </pre>

In OUT LOG Setting 1 In OUT LOG Setting 2 In OUT LOG Setting 3

<pre> OUT LOG START * LOG = 10 DATE 2018/ 2/15 1 20.14 mm 2 20.16 mm 3 19.86 mm 4 20.27 mm 5 20.27 mm 6 19.31 mm 7 19.84 mm 8 19.83 mm 9 19.80 mm 10 19.86 mm 11 19.86 mm 12 20.00 mm OUT LOG END * </pre> <p>This setting allows printout of data number, measurement value, and GO/±NG judgment result.</p>	<pre> OUT LOG START * LOG = 10 DATE 2018/ 2/15 1 20.41 mm 2 20.35 mm 3 20.31 mm 4 20.19 mm 5 20.35 mm 6 20.13 mm 7 20.13 mm 8 21.58 mm 9 21.58 mm 10 21.58 mm 11 21.58 mm 12 21.58 mm OUT LOG END * </pre> <p>This setting allows printout of data number, measurement date and time, and GO/±NG judgment result.</p>	<pre> OUT LOG START * LOG = 10 1 2018/ 2/15 10:28:28 21.00 mm 2 2018/ 2/15 10:28:31 20.10 mm 3 2018/ 2/15 10:28:33 20.35 mm 4 2018/ 2/15 10:28:37 19.03 mm 5 2018/ 2/15 10:28:29 21.58 mm OUT LOG END * </pre> <p>This setting allows printout of data number, measurement date and time, and GO/±NG judgment result.</p>
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Example of printout

MODE1

Various statistical calculations are executed using all input data. If the tolerance limits have been set, GO/±NG judgment and histogram creation are also enabled.

MODE2

In addition to the MODE1 function, measurements within the tolerance limits are printed out as a D chart*. This chart allows you to identify the trend of variations in measurement data.
* D chart stands for Displacement chart.

MODE3

Only input of data automatically enables calculation processing of complex control limit values as well as calculation for creating an Xbar-R control chart.

Statistical calculation data

MODE0

GO/±NG judgment

MODE1, 2

N: Number of pieces of data
MAX: Maximum value
MIN: Minimum value
R: Range
X: Mean value
σn: Standard deviation of a population (N)
σn-1: Sample standard deviation (N-1)
-NG: For the number of pieces of data smaller than the lower limit
+NG: For the number of pieces of data larger than the upper limit
P: Percentage of rejects
Cp: Maximum process capability potential
Cpk: Actual process capability achieved

MODE3

N: Number of pieces of data
MAX: Maximum value
MIN: Minimum value
n: Number of subgroups (up to 10)
X: Mean value in a subgroup
R: Range of a subgroup
X: Mean value
X-UCL: Upper control limit
X-LCL: Lower control limit
R: Center (R control)
R-UCL: Upper control limit (R control)
R-LCL: Lower control limit (R control)

Product catalog E12051



Video

