

Typical application

Measurement
and storage
at site

Transfer



Custom Excel sheet

Analysis
by PC

Example of printout

MODE1

```

* LIMIT DATA *
LCL 20.11 mm
LUL 21.89 mm
1 20.14 mm
2 20.16 mm
3 19.65 mm
4 19.77 mm
5 20.21 mm
6 20.22 mm
7 10.81 mm
8 10.84 mm
9 10.83 mm
10 10.80 mm
11 12.56 mm
12 20.22 mm
PART NO.:
DATE 2016/ 2/15
TIME 12: 8
NAME:
* RESULT *
MAX 21.06 mm
MIN 19.65 mm
σ 0.1043 mm
σn 0.4911 mm
σn-1 0.4936 mm
GO 1
NG 0
CP 0.6815 %
* HISTOGRAM *
LCL 11 mm
LUL 21.89 mm
DIF 10
1 10
2 10
3 10
4 10
5 10
6 10
7 10
8 10
9 10
10 10
11 10
12 10

```

MODE2

```

* LIMIT MODE *
LCL 20.11 mm
LUL 21.89 mm
* NO LIMIT DATA *
LIM1 20.27 mm
* NEW LIMIT DATA *
LIM1 20.27 mm
DATE 2016/ 2/17
TIME 14:33
LCL 20.27 mm
LUL 21.89 mm
PART NO.:
DATE 2016/ 2/17
TIME 14:33
NAME:
* RESULT *
MAX 21.06 mm
MIN 19.65 mm
σ 0.1043 mm
σn 0.4911 mm
σn-1 0.4936 mm
GO 1
NG 0
CP 0.6815 %

```

MODE3

```

SUB GR. NO. 1
1 20.33 mm
2 20.77 mm
3 20.55 mm
4 20.75 mm
5 20.64 mm
6 20.50 mm
7 20.57 mm
SUB GR. NO. 2
1 27.72 mm
2 27.87 mm
3 27.72 mm
4 27.64 mm
5 27.66 mm
6 27.64 mm
7 27.66 mm
SUB GR. NO. 3
1 27.72 mm
2 27.87 mm
3 27.72 mm
4 27.64 mm
5 27.66 mm
6 27.64 mm
7 27.66 mm
PART NO.:
DATE 2016/ 2/17
TIME 14:40
NAME:
* CONTROL LIMIT *
LCL 11 mm
LUL 21.89 mm
DATE 2016/ 2/17
TIME 14:40
NO. OF SUB GR. 3
SAMPLE SIZE
1 27.6407 mm
2 27.6407 mm
3 27.6407 mm
4 27.6407 mm
5 27.6407 mm
6 27.6407 mm
7 27.6407 mm

```

In OUT LOG Setting 1

```

* OUT LOG START *
* LOG = 10
DATE 2016/ 2/15
1 20.14 mm
2 20.16 mm
3 19.65 mm
4 19.77 mm
5 20.21 mm
6 20.22 mm
7 10.81 mm
8 10.84 mm
9 10.83 mm
10 10.80 mm
11 12.56 mm
12 20.22 mm
* OUT LOG END *

```

This setting allows printout of measurement time, measurement value, and GO/±NG judgment result.

In OUT LOG Setting 2

```

* OUT LOG START *
* LOG = 10
DATE 2016/ 2/15
1 20.14 mm
2 20.16 mm
3 19.65 mm
4 19.77 mm
5 20.21 mm
6 20.22 mm
7 10.81 mm
8 10.84 mm
9 10.83 mm
10 10.80 mm
11 12.56 mm
12 20.22 mm

```

This setting allows printout of data number, measurement date and time, and GO/±NG judgment result.

In OUT LOG Setting 3

```

* OUT LOG START *
* LOG = 10
DATE 2016/ 2/15
1 2016/ 2/15 10:28:28
20.14 mm
2 2016/ 2/15 10:28:31
20.16 mm
3 2016/ 2/15 10:28:33
19.65 mm
4 2016/ 2/15 10:28:37
19.77 mm
5 2016/ 2/15 10:28:28
20.21 mm
6 2016/ 2/15 10:28:28
20.22 mm
7 2016/ 2/15 10:28:28
10.81 mm
8 2016/ 2/15 10:28:28
10.84 mm
9 2016/ 2/15 10:28:28
10.83 mm
10 2016/ 2/15 10:28:28
10.80 mm
11 2016/ 2/15 10:28:28
12.56 mm
12 2016/ 2/15 10:28:28
20.22 mm

```

This setting allows printout of data number, measurement date and time, and GO/±NG judgment result.

Product catalog
E12051

Video



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

In addition to the conventional (DP-1VR) printing and statistical calculation functions, data logging and USB output functions are added and enhanced.

- 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).

264-505
DP-1VA LOGGER

SPECIFICATIONS

Code No.	264-505*
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 10×9,999 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 × 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) ×201 (D) ×75.2 (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

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)