

Convenient data collection tool and quality control software

- This is a palm-sized printer used to print measurement data from Digimatic gages or to perform statistical analysis.
- The versatile DP-1VR printer not only prints measurement data, but performs a variety of statistical analyses, draws histograms and D-charts and also performs complex operations on X-bar R control charts.
- Equipped with RS-232C output and GO/NG judgment output as standard functions, this processor delivers the high reliability expected from an advanced quality inspection machine.
- This line thermal printer enables fast and quiet printing.



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Mitutoyo

* DP-1VR *

* MODE 1 *

DATE 2002/ 2/27
TIME 10:43

# LIMIT DATA
LSL          1*
USL          28.44
USL          27.00
TOL          0.58
            公差

▲ 1          27.02
▼ 2          28.43
▼ 3          26.42
▼ 4          26.56
5          26.56
6          26.63
7          26.62
8          26.48
9          26.48
10         26.70
            公差

PART No. :

DATE 2002/ 2/27
TIME 10:43
NAME :

# RESULT *
N          10
MAX        27.02
MIN        26.42
S          0.60
σ          26.5800
s          1673
cni        0.1764

-NG         2
+NG         1
F          30.000
Cp          0.529
Cpk         0.283

# HISTOGRAM *
LSL          27.00
USL          28.44
TOL          0.58

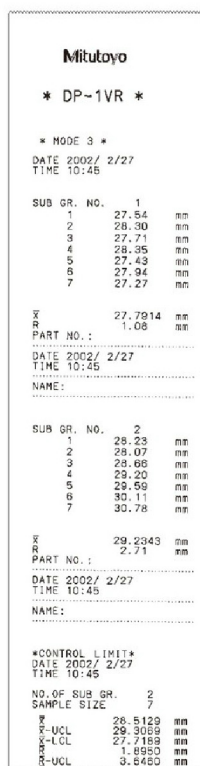
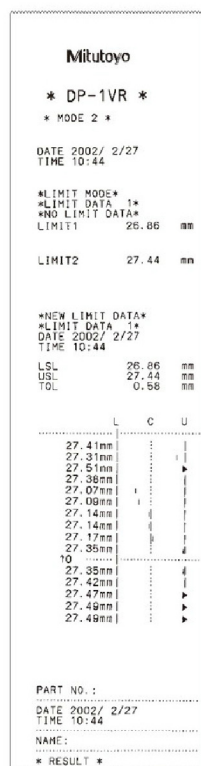
DIV          10

-NG         2 00
+NG         2 00
F           2 00
Cp           2 00
Cpk          2 00
USL          0
LSL          0
USL+NG      1 0

□ = 1

A          28.4400 mm -
B          28.4800 mm -
C          28.5520 mm -
D          28.6279 mm -
E          28.6539 mm -
F          28.7185 mm -
G          28.7755 mm -
H          28.8319 mm -
I          28.8879 mm -
J          28.9439 mm -
K          29.0000 mm -

```



Mode 0	Modes 1,2	Mode 3
GO/±NG judgment	N: Number of data MAX: Maximum value MIN: Minimum value R: Range $\bar{X}$: Average value σ: Standard deviation of the sample (N) σ_{N-1}: Sample standard deviation (N-1) -NG: Number of data smaller than lower limit value +NG: Number of data larger than upper limit value P: Fraction defective Cp: Process capability index Cpk: Process capability index (process target centered)	N: Number of data MAX: Maximum value MIN: Minimum value n: Number of subgroup (Max.10) $\bar{X}$: Average value of subgroup R: Range of subgroup $\bar{X}$: Mean value $\bar{X}$-UCL: Upper control limit $\bar{R}$: Mean (R control) R-UCL: Upper control limit (R control) R-LCL: Lower control limit (R control)

- **Order No.: 264-504**
- **Model:** DP-1VR
- **Data processing capacity:**
 - Mode 0: 100000 data items
 - Modes 1,2: 9999 data items
 - Mode 3: Sample size (10 x subgroup 9999=99990 data)
- **Upper/lower limit value** 5 pairs can be held in memory
- **Output:** (1) RS-232C output level (TTL)
function(2) GO+NG judgment output (+NG, GO, -NG)
- **Input timer:** Input intervals
0.25s, 1s, 5s, 30s, 1min, 30min, 60min
- **Printing method:** Thermal line printer 384 dots/char
- **Character specification:** Normal character 24 x 16 dots /
Large character 36 x 24 dots
- **Printing speed:** 0.5s per line (using AC adapter)
- **Printing line:** 10000 lines of normal characters per roll
7000 lines of large characters per roll
- **Printing paper:** High durability thermo-sensitive paper
Width 58mm x length 48m
 Note: Printed characters do not fade if a printout is stored in a cool dark place, but if it is to be used for official documents, or stored more than 5 years, it is recommended that a copy be made.
- **Power supply:** 2 power methods
 - (1) AC adapter 100V (6VDC, 1000mA) supplied as a standard accessory.
 - (2) 4pcs. of LR6/AA size (alkaline or Ni-Mh)
- **Battery life:** 10000 lines (5s/line using a 1600mAh Ni-Mh battery)
 Note: This is a typical value and is not guaranteed.
- **External dimensions:** 94 (W) x 201 (D) x 75.2 (H) mm
- **Mass:** 390g (main unit)
- **Optional Accessories:**
 - (1) RS-232C changing cable
 For connection with a PC
 Cable length 1m, D-sub 9 pin
 - (2) RS-232C counter cable
 For connection with KA counter
 Cable length 1m, D-sub 25 pin
 - (3) GO+NG judgment cable
 Cable length 2m, D-sub 10 pin terminal/separate wires
 - (4) Foot switch
- **Consumable items:**
 Printing paper (10 rolls)

- Output signal level: TTL
- Communication method: Half-duplex
- Communication speed: 1200/2400/4800/9600/19200
- Bit configuration: Start bit 1 bit
Data length: 7/8 bit
Parity check: Even/odd/none
Stop bit: 2 bit
- Data format

When data output													
Number of bytes	1	2	3	4	5	6	7	8	9	10	11	12	13
Data	0	1	A	Model	MSD							LSD	CR

Data parts (Floating decimal point)
 Model: + or -
 Measurement item
 Channel No.
 Code No.

Example of format	Output data
Display of a Digimatic gage	
0.123	01A+0000.123CF

Error code

Number of bytes	1	2	3	4
Data	9	1	CR	

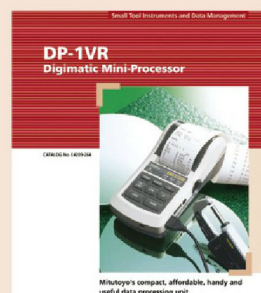
Data request command

Number of bytes	1	2
Data	1 or A	CR

Error code: 1 (No data input)
 2 (Loaded data with the format other than specified)
 9 (System error: head temperature error, overflow, power supply/voltage error, head up, paper error)

Channel No.

Error format



Refer to the DP-1VR leaflet (E4209) for more details.