

DP-1VR

Digimatic Mini-Processor

CATALOG No. E4209-264



Mitutoyo's compact, affordable, handy and useful data processing unit

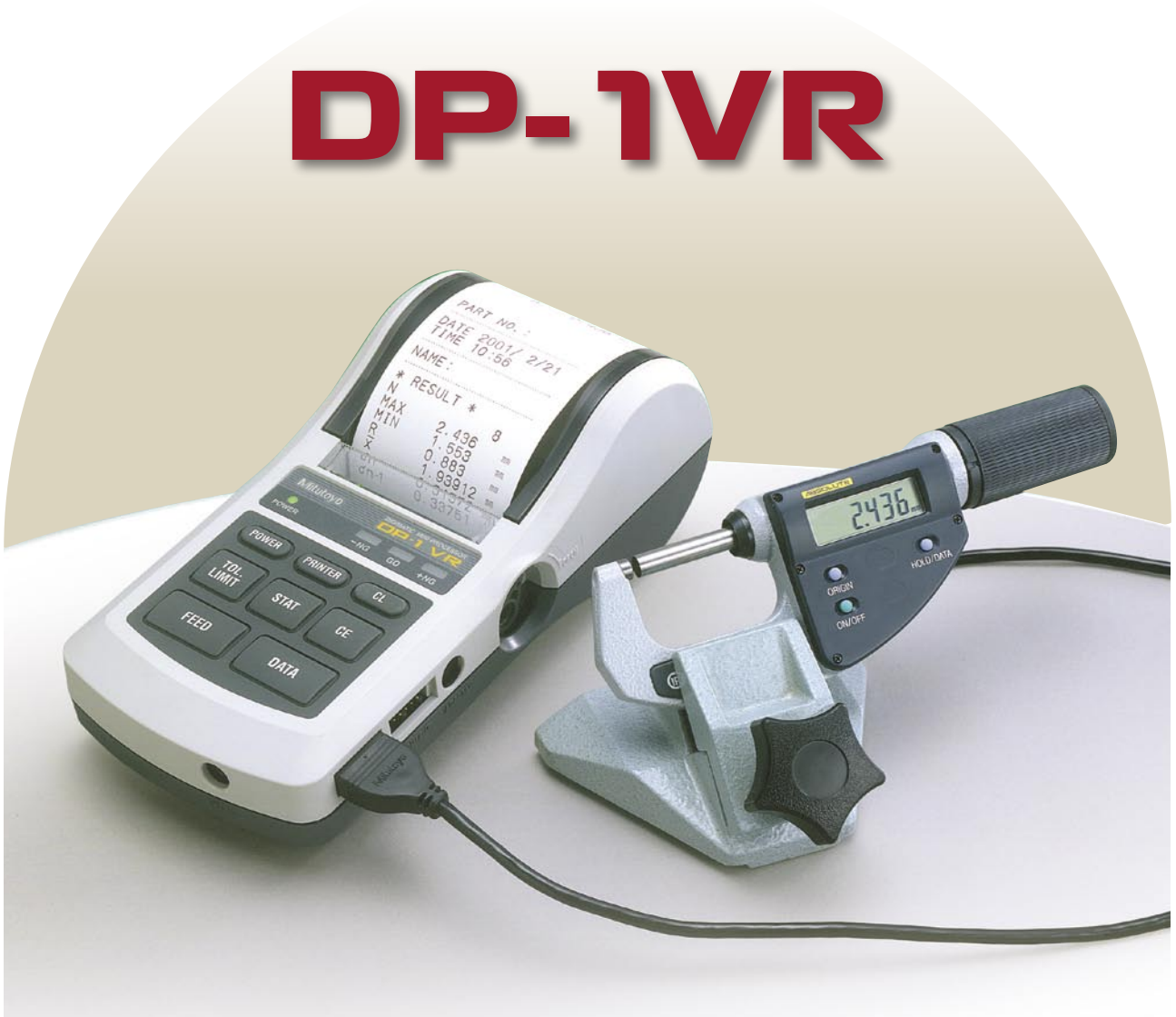
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FEATURES

Mitutoyo's DP-1VR is so compact, it fits right in your palm. But with this powerful little device you can print data from a Digimatic caliper, micrometer and more using the Data Output function, and can even calculate statistics. Printing speed is excellent too, and with the built-in thermal line printer there's almost no noise. What's more, the thermosensitive paper has outstanding durability and chemical resistance for long-term storage. The DP-1VR even lets you transmit data to a computer using an RS-232C connecting cable (09EAA084).

DP-1VR



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SPECIFICATIONS

Order No.	264-504*
Printing method	Thermal line printer
Printing density	384dot (8dot/mm)
Printing speed	6.5mm/s (using AC adapter)
Printing paper	48mm
Printing capacity per roll	Approx. 6500 lines for large characters Approx. 12000 lines for normal characters
Processing capacity	mode 1/2/3: 999 data mode 0: 10000 data
Printing data	Measuring data, GO/±NG judgment, number of data, maximum/minimum value, range, average, standard deviation, number of defective, function defective, process capability index, histogram, D-chart, control chart generation for X̄-bar and central limit data, data and time
Output function	Output of measuring data (RS232C) or GO/±NG judgment
Input timer	0.25s, 1s, 5s, 30s, 1 min, 30min, 60min
Power	AC adapter 6V (No interchangeable to DP-1HS) Electric battery: LR6 (alkaline), ni-Mh (AA size)
Battery life	10 years (clock battery), 10000 lines (1600mA 1 time/5 sec. using the rechargeable battery)
Operating temperature	0°C to 45°C (using AC addapter), 10°C to 45°C (using battery)
Storage temperature	-10°C to 50°C

*To denote your AC line voltage add the following suffixes (e.g. 264-504-5A).

-5A for 120V, -5D for 220V (Europe), -5E for 240v (UK),

-1K for 220V for korea without AC adapter, -5F for 240V (Oceania)

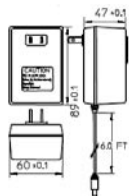
SPECIFICATIONS OF AC ADAPTER

Order No.	264-504*	Mass
09EAA119*	100V-240V	210g

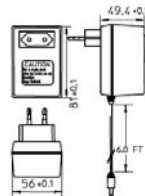
*To denote your AC line voltage add the following suffixes (e.g. 09EAA119A).

A for 110V/115V, D for 230V (Europe), 5E for 230v (UK), K for 220V (Japan)

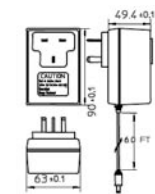
K for 230V (Oceania), DC for 220V (China), no suffix is for 100V (Japan)



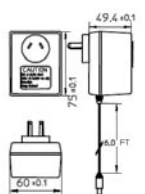
09AAE119,A,DC



09AAE119K,D

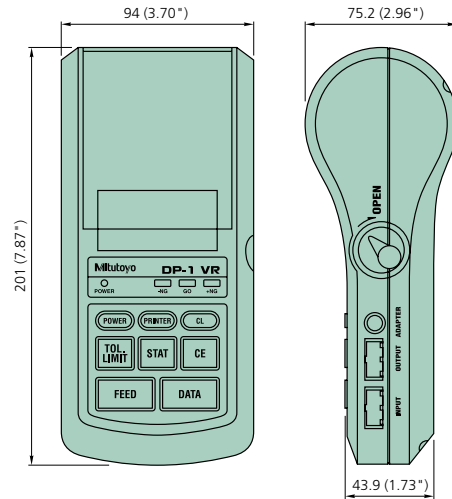


09AAE119E



09AAE119F

DIMENSIONS



STANDARD ACCESSORIES

User's manual, Printing paper: 10 rolls (**09EAA082**),

AC adapter : **09EAA119**(100V/115V),

09EAA119D(230V for Europe), **09EAA119E**(230V for UK),

09EAA119K(220V for Korea), **09EAA119F**(230V for Oceania),

09EAA119DC(230V for China),

Key operation quick reference, Wrist strap

OPTIONAL ACCESSORIES

09EAA084* RS-232C signal cable (1m, 9pin)

965516* GO/±NG judgment cable

937179T Foot switch

* It is impossible to use the both RS-232C cable and GO/±NG judgment cable at the same time.

Alarm functions

- **Line voltage** Voltage abnormality
- **Paper end** No printing paper
- **Head up** Paper cover open
- **Head temperature** Thermal abnormality of printer head
- **Over flow** Data input limit
- **Battery** Low voltage clock battery
- **Input data** Communication abnormality with measuring devices

Four Choices of Data Processing Mode

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*** DP-1VR ***

*** MODE 0 ***

DATE 2002/ 2/27
TIME 10:47

NEW LIMIT DATA
LIMIT DATA 2
DATE 2002/ 2/27
TIME 10:47

LSL 32.01 mm
USL 33.15 mm
TOL 1.03 mm

▲ 1 33.10 mm
▼ 2 33.27 mm
▲ 3 32.05 mm
▲ 4 33.50 mm
▲ 5 35.66 mm
▲ 6 36.79 mm
▲ 7 37.97 mm
▲ 8 36.67 mm
▲ 9 37.47 mm
▲ 10 35.16 mm
▲ 11 35.16 mm
▲ 12 34.46 mm
▲ 13 33.38 mm
▲ 14 31.92 mm
▲ 15 31.48 mm
▲ 16 32.40 mm
▲ 17 32.40 mm
▲ 18 32.68 mm
▲ 19 32.75 mm
▲ 20 32.91 mm

Mode 0:
Record the measurement data and tolerance judgment.

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*** DP-1VR ***

*** MODE 1 ***

DATE 2002/ 2/27
TIME 10:43

LIMIT DATA 1
LSL 26.44 mm
USL 27.00 mm
TOL 0.56 mm

NAME: _____

*** RESULT ***

N 10
MAX 27.02 mm
MIN 26.42 mm
R 0.60 mm
X 26.5900 mm
σn 0.1673 mm
σn-1 0.1711 mm

Mode 1:
Record the measurement data, statistical analysis and histogram.

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*** DP-1VR ***

*** MODE 2 ***

DATE 2002/ 2/27
TIME 10:44

LIMIT MODE
LIMIT DATA 1
NO LIMIT DATA
LIMIT1 26.88 mm
LIMIT2 27.44 mm

NEW LIMIT DATA
LIMIT DATA 1
DATE 2002/ 2/27
TIME 10:44

LSL 26.88 mm
USL 27.44 mm
TOL 0.56 mm

Mode 2:
A "D-chart" can be used to describe measurement data displacement visually. It's also possible to record the measurement data, statistical analysis and histogram at the same time.



Large character

Key functions

PRINT ON/OFF	Mode 0	Mode 1, 2
CL	Only measurement data clear. Press before setting limit.	
CE	Cancel the previous measurement data.	
TOL.LIMIT	Press before entering or finish the upper/lower measurement mde.	
STAT	Do not operate	Print out calculation result in the form of a histogram based on analysis of input data.
FEED	Printer paper is fed when this key is pressed	
DATA	Enter data via measuring devices	
PRINT ON/OFF	Controls the printer's ON/OFF status	
POWER	Power ON/OFF	

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* DP-1VR *
* MODE 3 *

DATE 2002/ 2/27
TIME 10:45

SUB GR. NO. 1
1 27.54 mm
2 28.30 mm
3 27.71 mm
4 28.35 mm
5 27.43 mm
6 27.14 mm
7 27.27 mm
Average 27.79
X̄ 27.79
R 1.06
PART NO.:
DATE 2002/ 2/27
TIME 10:45
NAME:
SUB GR. NO. 2
2 28.23 mm
3 28.07 mm
4 28.56 mm
5 29.20 mm
6 29.59 mm
7 30.11 mm
Range 2.78
X̄ 29.2343 mm
R 2.71 mm
PART NO.:
DATE 2002/ 2/27
TIME 10:45
NAME:
*CONTROL LIMIT*
DATE 2002/ 2/27
TIME 10:45
NO. OF SUB GR. 2
SAMPLE SIZE 7
X̄-UCL 28.5129 mm
X̄-LCL 27.7189 mm
R-UCL 1.8950 mm
R-LCL 0.1440 mm

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Upper control limit (X control)

Lower control limit (X control)

Upper control limit (R control)

Lower control limit (R control)

Mode 3:
Automatically record the various calculation results to make a \bar{X} -R control chart.

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* DP-1VR *
* MODE 0 *

DATE 2002/ 2/27
TIME 10:49

1 32.91 mm
2 32.91 mm
3 33.21 mm
4 33.97 mm
5 34.04 mm
6 34.04 mm
7 35.22 mm
8 32.60 mm
9 32.92 mm
10 33.12 mm
11 33.86 mm
12 33.59 mm

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* The user can select large character format (excluding mode 2).

Power LED



Limit LED

Output connector
EXT.P jack

Input connector

Lever-operated paper cover
AC adapter jack



One touch setting for the printing paper

Key functions

PRINT ON/OFF	Mode 3	
	Subgroup in measurement	Subgroup after measurement
CL	Re-enter from data No.1	Only measurement data clear.
CE	Cancel previous measurement data.	Cancel previous subgroup.
TOL.LIMIT	Exit the measurement. Cancel measurement mode.	Go to next subgroup measurement.
STAT	Finish the subgroup measurement. Print the X-R calculation result.	Calculate and print out the control limit value from each subgroup to complete the entry.
FEED	Advance paper.	
DATA	Enter data via measuring devices	
PRINT ON/OFF	Controls the printer's ON/OFF status	
POWER	Power ON/OFF	



- Coordinate Measuring Machines
- Vision Measuring Systems
- Form Measurement
- Optical Measuring
- Sensor Systems
- Test Equipment and Seismometer
- Digital Scale and DRO Systems
- Small Tool Instruments and Data Management

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