

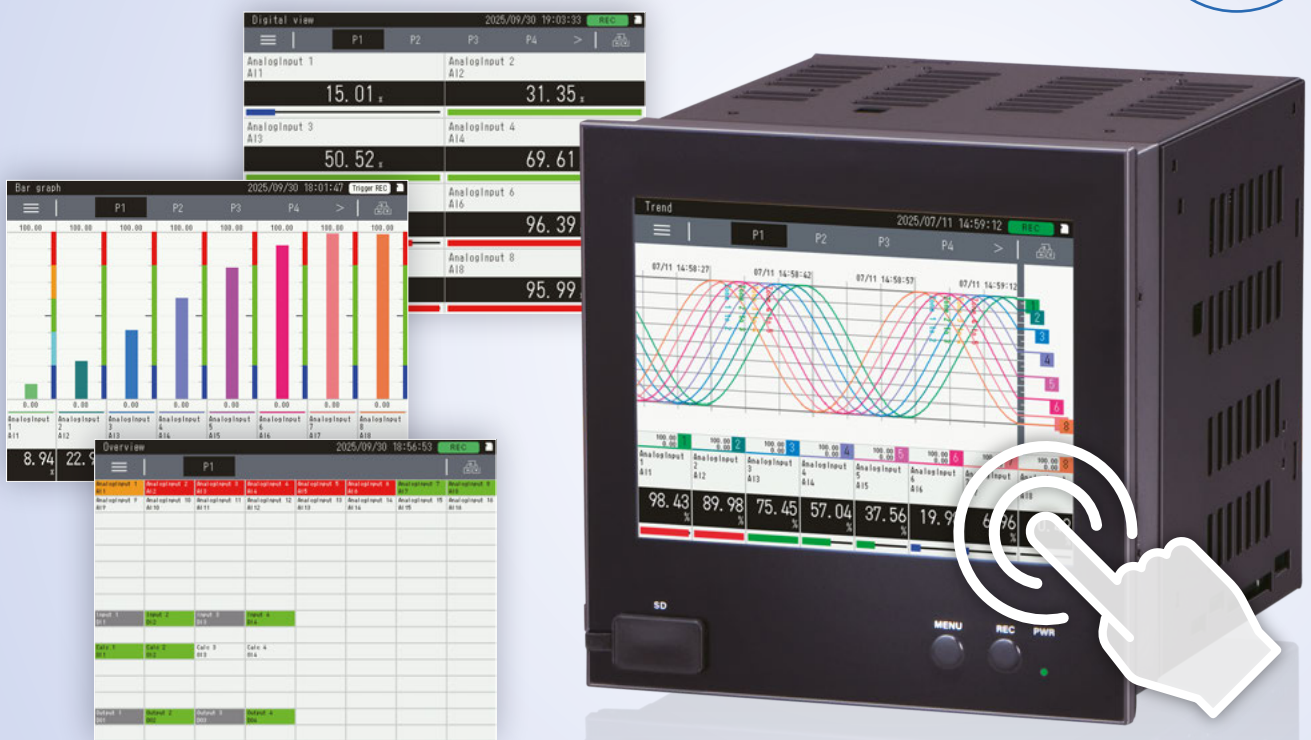
5.7 英寸 LCD / 触摸屏

无纸记录仪

VR144E-G16

采用高清TFT 液晶屏，
画面清晰

9/16 DIN
144
mm



机型: VR144E-G16 CE IP55

触摸屏

前端面板
IP55

micro
SD

带多种显示画面与稳定的基础功能， 为现场作业提供支持。

无纸记录仪（机型：VR144E-G16）在 144mm 方形前面板上搭载 5.7 英寸触摸式 TFT 彩色液晶显示屏，不仅能以清晰色彩显示趋势曲线与数字值，更因采用触摸屏设计，可实现直观操作。

其他主要功能包括：可创建任意 2 个画面的图形面板、数据记录功能、邮件报警功能、FTP 客户端 / 服务器功能。内置 I/O 有：Ai 16 点、Di 2 点、Do 2 点，可直接进行信号采集与输出。

100 毫秒采样周期

可将测量数据以及运行、停止状态保存至内部存储器，也可保存到 microSD 卡中。

可通过专用应用程序对采集的数据进行显示与解析。

可创建图形面板画面，显示测量状态。

可用于触发输入及报警输出

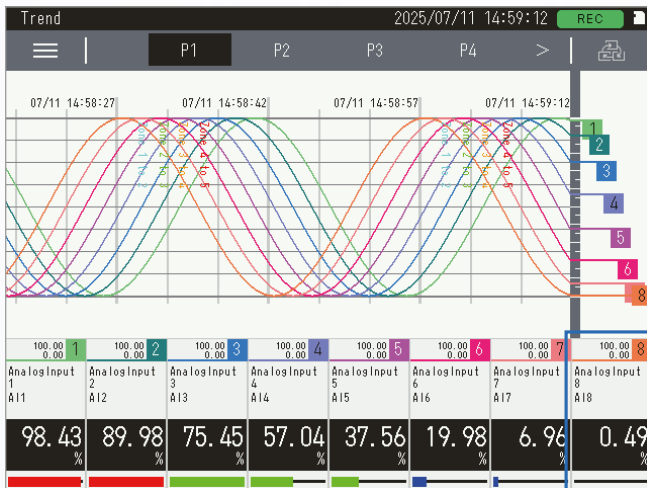
带直流电压 16 点、开关量 2 点输入、PhotoMOS 继电器 2 点输出。

特点 01

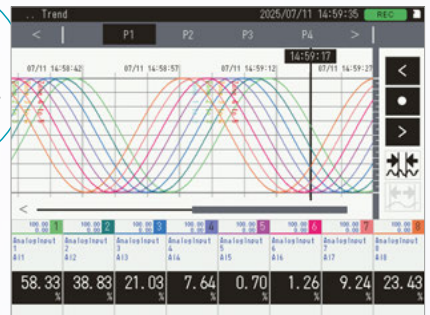
可实时确认测量数据，也可随时查阅历史记录。

本产品带画面显示功能，如趋势画面、一览画面等。此外还可以查看历史记录。

趋势图



历史趋势图画面
点击即可切换趋势图。



- 画笔号, 量程
- 名称, 注释
- 当前值, 单位
- 柱形图

用趋势图显示 (每页 4 笔或 8 笔)
所有输入输出通道 (Ai/Di/Oi/Do) 均可分配给各画笔。

画笔数	64 笔 (每页 4 笔或每页 8 笔)
画笔可分配的通道	Ai、Di、Oi、Do 的所有通道
显示量程	用实际测量值指定 100% 和 0% 的位置。
记录方式	从 TRD / CSV (UTF-8) / CSV (Shift-JIS) 选择
记录内容	趋势图数据、事件数据、备注数据

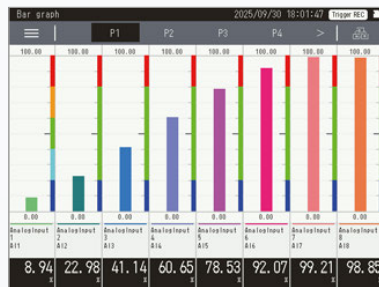
数据容量	单个文件最多可采样 50000 点 × 64 笔
自动记录	启动无纸记录仪开始记录 可选择 停止 / 正常记录 / 触发记录
记录周期	从 100ms、500ms、1sec、2sec、5sec、10sec、1min、2min、5min、10min、30min、1hour 中选择

一览画面



显示各通道的最新数据。单画面可显示的点数可从 16、32、64、128 点中选择。

柱形图画面



显示最新的输入输出值，通过画笔显示各通道参数

事件画面



无论事件日志记录功能有效与否，均会显示最新发生的事件日志，最多显示 40 条。

5.7 英寸 TFT 液晶显示屏



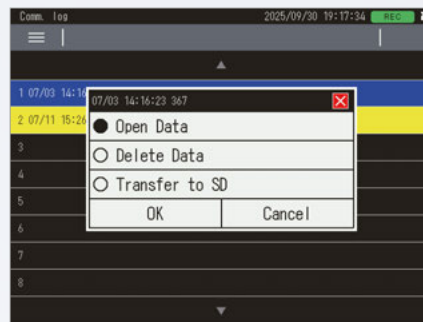
带 microSD 卡插槽

触摸屏

特点02

可将设备的测量数据与运行 / 停止状态保存到内部存储器, 也可保存到 microSD 卡中。

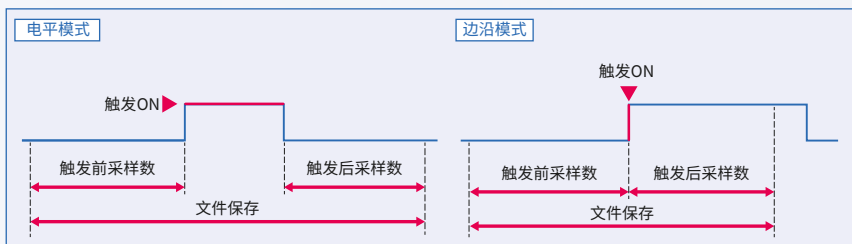
可以按内部存储器中记录的存储块单位显示和删除趋势数据和日志数据、并传输至microSD卡、还可切换存储块、清除和初始化趋势数据和日志数据。



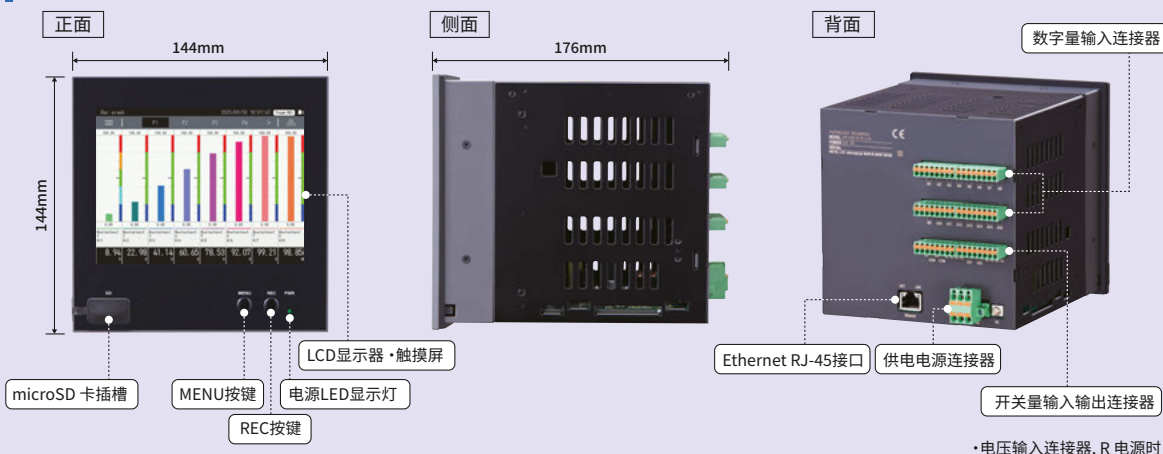
特点03

可用于触发输入及报警输出

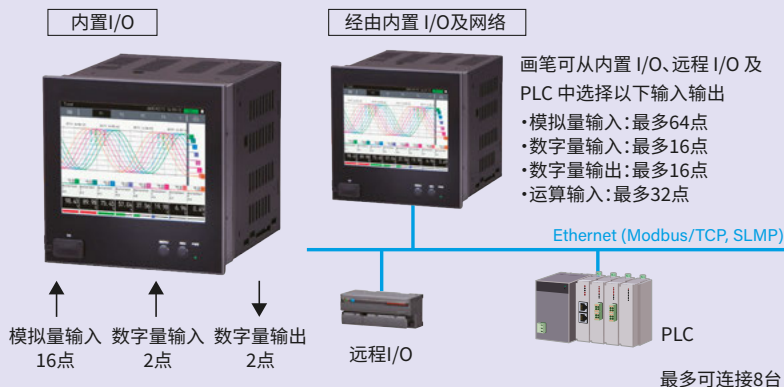
在 Ai、Di、Oi 各通道中设置触发条件, 将触发条件发生前与发生后所设定的采样点数作为一组记录数据, 存储模块会依次切换。同时, 存储模块中的数据将被传输至 microSD 卡, 并以文件形式保存。可选择「电平触发」与「边沿触发」两种模式。



各部位名称·尺寸



系统配置



运算输入

可对采集到的模拟量信号进行以下运算处理并记录。

运算种类

不使用 / 加减法 / 乘法 / 除法 / 开平方 / 移动平均 / 一次滞后 / exp / 常用对数 / 自然对数 / 峰值保持 (最大 / 最小) / 模拟量累计 / 乘方 / F值运算 / 逆对数 / 缩放 / 时间

主要规格

INPUT & OUTPUT

ANALOG INPUT

Input signal: DC voltage, 16 points (non-isolated between channels)

Select input range from the following

(ch. 1, ch. 2):

- ± 10 V DC to ± 0.8 V DC (input resistance: ≥ 1 M Ω)
- ± 0.8 V DC to ± 80 mV DC (input resistance: ≥ 100 k Ω)
- ± 80 mV DC to ± 10 mV DC (input resistance: ≥ 100 k Ω)

CONTACT INPUT

Contact input: Dry contact, 2 points

Common: Negative common per 2 points

Maximum inputs applicable at once: No limit

Rated detective voltage: Approx. 5 V DC (internal supply)

ON voltage / resistance: ≤ 0.5 V / ≤ 500 Ω

OFF voltage / resistance: ≥ 4.0 V DC / ≥ 20 k Ω

Input current: Approx. 3.8 mA

Input resistance: Approx. 1 k Ω

ON delay: ≤ 2.0 msec.

OFF delay: ≤ 2.0 msec.

OUTPUT

Photo MOSFET relay output, 2 points

Rated load voltage: 48 V peak AC / DC

Rated output current: 0.2 A per point

Output ON resistance: ≤ 1 Ω

Leakage current at open circuit: ≤ 0.1 mA

ON delay: ≤ 50 msec.

OFF delay: ≤ 1 msec.

(Recommended to protect the contact and to eliminate noise when driving an inductive load.)

ALARM OUTPUT

Do designated as alarm contact output can be turned ON at event occurrence.

EVENT

- Zone output of Ai, Di, Oi
- Communication failure in e-mail reporting, FTP client, Modbus/TCP and SLMP

FUNCTIONS USING LAN/INTERNET

EVENT REPORTING E-MAIL

E-mail reporting function is available at event occurrence or at the specified time.

Encrypted communication is supported. (SMTP over SSL)

Selected Do can be turned on after sending an e-mail.

- **Number of e-mail recipients:** 16
- **Number of event reporting messages:** 32
- **Number of regular reporting messages:** 32
- **Channel status:** Ai, Di, Oi, Do data status can be included in a mail.

FTP CLIENT

Files stored in the micro SD card can be uploaded to an FTP server.

- Supports FTPS (Explicit mode)

FTP SERVER

Reading and deleting files in the SD card by an FTP client is available.

Simultaneous connection: 1

Operation verified FTP client: FFFTP

TIMEKEEPING

SNTp client

- The recorder's internal time can be adjusted automatically.
- Time adjustment is performed when the power is turned on and at the specified time.

TREND DATA STORING

Trend data, event data and comment data are recorded in memory blocks and then transferred to the SD card at the specified time intervals.

Recording method is selectable from normal recording or trigger recording.

NUMBER OF MEMORY BLOCKS

64 blocks

MEMORY BLOCK TRANSITION TIMING

When 50,000 events of trend data are recorded and at micro SD card writing timing

RECORDING METHOD

- **Normal recording:** Recording continuously until recording is manually stopped.

- **Trigger recording (edge):** Recording up to 1200 samples of data before and after the trigger condition is met, respectively.

- **Trigger recording (level):** Recording data during the trigger condition is met.

SAMPLING RATE

- 100 ms

STORING RATE

100 ms, 500 ms, 1 sec., 2 sec., 5 sec., 10 sec., 1 min., 2 min., 5 min., 10 min., 30 min., 1 hour

TREND DATA

- **Number of channels:** Max. 64 (select from Ai, Di, Do, Oi)
- **Number of events:** Max. 50000 sample \times number of channels (per file)

EVENT DATA

- **Event:** Zone transition for Ai and Oi, change of Di status
- **Recorded content:** Time, event
- **Number of events:** 3000 (per file)

COMMENT DATA

- **Maximum number of input characters:** 32
- **Recorded content:** Time, comment
- **Number of events:** 1000 (per file)

DATA FORMAT

Dedicated format (binary, extension "TRD") or CSV format (UTF-8/SJIS).

VIEWER SOFTWARE

The data stored in the SD card can be displayed on dedicated Viewer Software (Model: TRViewer)*1.

Also, data can be converted to CSV format file.

(*1)Viewer Software (Model: TRViewer) is downloadable for free from our website.

SD CARD WRITING TIMING

Storing rate	SD card writing timing
100 ms	10 min., 30 min., 1 hour
500 ms	30 min., 1 hour, 6 hours
1 sec.	1 hour, 6 hours, 12 hours
2 sec.	1 hour, 6 hours, 12 hours, 1 day
5 sec.	6 hours, 12 hours, 1 day
10 sec.	6 hours, 12 hours, 1 day
1 min.	1 day, 1 week
2 min.	1 day, 1 week
5 min.	1 day, 1 week, 1 month
10 min.	1 day, 1 week, 1 month
30 min.	1 day, 1 week, 1 month
1 hour	1 week, 1 month

DATA FILE NAME

Files are named YYYYMMDDhhmmss when saved to the micro SD card. e.g.)

Dedicated format:

20240611100000000000.TRD

CSV format:

202406111000000_T.CSV (trend)

202406111000000_E.CSV (event)

202406111000000_C.CSV (comment)

AUTO DELETING FUNCTION

- When the function is disabled, recording is possible until the SD card's storage capacity is exhausted.
- When the function is enabled, if the SD card's storage capacity falls below 100MB, the oldest data will be deleted(excluding the data from the past 4 years).

设定软件 (机型: VR144CFG)

https://www.mgco.jp/download_w/dl_vr144cfgE.html



Website



Request Info

Your local representative:

MG CO., LTD.
www.mgco.jp