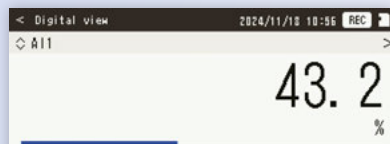


# COLOR LCD DISPLAY PAPERLESS RECORDER

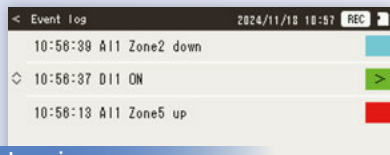
Compact Recorder Fitting into the Tiniest Spaces

1/8 DIN  
H W  
48 x 96  
mm

Necessary functions put together  
in a small screen



Digital view



Log view



Overview



Front Panel  
IP55

micro  
SD

**NEW**

Model: VR4896E-G2 CE IP55

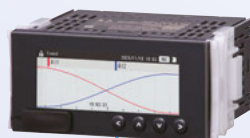
## System configuration

### Built-in I/O



Ai  
2 points  
Di  
1 point  
Do  
1 point

### Built-in I/O plus network I/O



Remote I/O  
Ethernet (Modbus/TCP, SLMP)  
PLC  
Up to 2 devices

Selectable I/O signals among  
built-in I/O, remote I/O and PLC:

- Analog input: max. 4 points
- Discrete input: max. 2 points
- Discrete output: max. 2 points
- Operational input: max. 4 points

### What is an operational input?

The following functions can be  
applied to analog signal inputs for  
recording:

### Operational functions

Addition and subtraction /  
Multiplication / Division /  
Square root / Moving average /  
Delay buffer / exp /  
Common logarithm /  
Natural logarithm /  
Peak hold (max) / Valley hold (min) /  
Analog accumulation / Power /  
F value calculation / Antilogarithm /  
Scaling / Time

## I/O SPECIFICATIONS

### Analog input

Input signal: DC voltage, 2 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 MΩ)
- ±0.8 V DC to ±80 mV DC (input resistance: ≥ 100 kΩ)
- ±80 mV DC to ±10 mV DC (input resistance: ≥ 100 kΩ)

### Discrete input/output

Discrete input: 1 point (rated detective voltage: approx. 5 V DC (internal supply))

Discrete output: 1 point (photo MOSFET relay)

## TREND DATA STORING

When an SD card is placed, trend data, event data and comment data are recorded in the internal memory and then transferred to the SD card at the specified time intervals.

### Recording method

- Normal recording: Recording continuously until recording is manually stopped.
- Trigger recording (edge): Recording up to 100 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. 4 (Select from Ai, Di, Do, Oi)
- Number of events: Max. 50000 samples × 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

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

### 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

### Writing period

Approx. recording time period for TRD format with a 16 GB micro SD card

Storing rate	1 pen	2 pens	4 pens
100 ms	8 years	4 years	2 years
500 ms	10 years	10 years	10 years
1 sec.	10 years	10 years	10 years
2 sec.	10 years	10 years	10 years
5 sec.	10 years	10 years	10 years
10 sec.	10 years	10 years	10 years
1 min. - 1 hour	10 years	10 years	10 years

Note 1) Only the trend recording is enabled.

Approx. recording time period for CSV format with a 16 GB micro SD card

Storing rate	1 pen	2 pens	4 pens
100 ms	4 years	2 years	1 year
500 ms	10 years	10 years	5 years
1 sec.	10 years	10 years	10 years
2 sec.	10 years	10 years	10 years
5 sec.	10 years	10 years	10 years
10 sec.	10 years	10 years	10 years
1 min. - 1 hour	10 years	10 years	10 years

Note 2) Only the trend recording is enabled. (The values are calculated as 8 single-byte characters)

### Viewer software

The data stored in the SD card can be displayed on the 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 web site.

## ALARM CONTACT 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

### E-mailing

E-mail reporting function is available at event occurrence or at the specified time. Encrypted communication is supported. (SMTP over SSL)

- Number of e-mail recipients: 8
- Number of event reporting messages: 4
- Number of regular reporting messages: 4
- Channel status: Ai, Di, Oi, Do data status can be included in a mail.

### FTP client

Files stored in the 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.

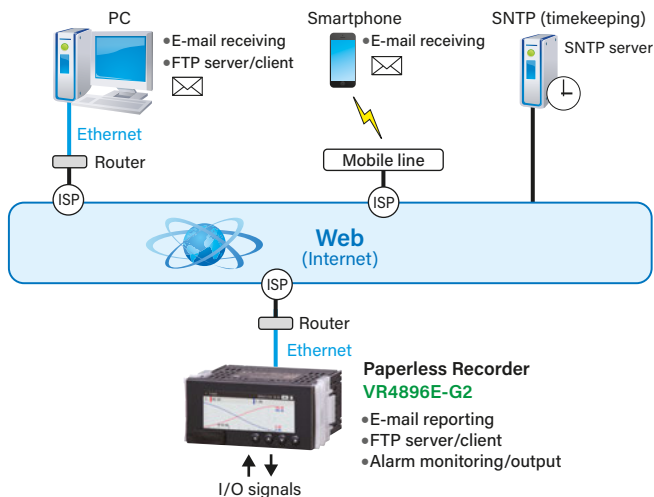
Simultaneous connection: 1

Operation verified FTP client: FFFFTP

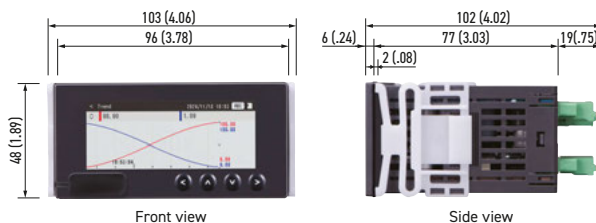
### Timekeeping

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.



## EXTERNAL DIMENSIONS unit: mm (inch)



MG CO., LTD.  
www.mgco.jp

Your local representative: