RION

Automatically controls external facility when earthquake occurs
Contributes to prevent secondary disaster and protect facility


Seismometer for facility control
RSM-300

Features

■ Alarm LED illuminates and alarm contact circuit is made when the seismic motion exceeds the preset alarm level to control external facility.

■ 4 stages of alarm level can be set in between 1 Gal and 999 Gal.

■ The fault LED illuminates and the external devive is notified by making fault contact circuit.

■ The sensor condition can be monitored constantly by receiving the signal from the seismic sensor.

■ Digital-output capacitance type sensor is equiped. Achieving both high accuracy and stability.

Specifications (RSM-300)

Display range	0 Gal to 999 Gal
	(lower limit depending on Detecting Level:Initial setting 5 Gal)
Frequency range	0.05 Hz to 40.0 Hz
Detecting frequency range	0.3 Hz to 10.0 Hz
Input cominucation protocol	RS-422
Indication method	3 Digit 7 Segment LED Display 0 Gal to 999 Gal
	Indication of failure code when detected system failure
Alarm output	4 contacts close when exceeding the vibration preset alarm level
	Contact Form A or B[*1] DC24 V, 1 A AC125 V, 0.5 A
Failure output	1 contact close when detected system failure
	Contact Form A or B[*2] DC24 V, 1 A AC125 V, 0.5 A
Analog output	4 mA to 20 mA (optional)
Reset operation	Display : Automatic reset after 1 hour from alarm and failure outputs
	Contact : Automatic reset after 10 seconds from alarm and failure outputs[*3]
	Manual reset available with reset button on the front panel.
Power supply	100 V AC (optional change to 24 V DC)
Dimensions · Weight	Approx. 85 mm (H) ×170 mm (W) × 80 mm (D) (excluding protruding parts),
	Approx. 1 kg
Surge protection	With varistor

[*1] The alarm level shall be set in the factory. Contact A or Contact B can be selected as factory option.
[*2] Contact A or Contact B can be selected as factory option.
[*3] Preset time is 10 seconds, can be changed as factory option.

## Outline drawing
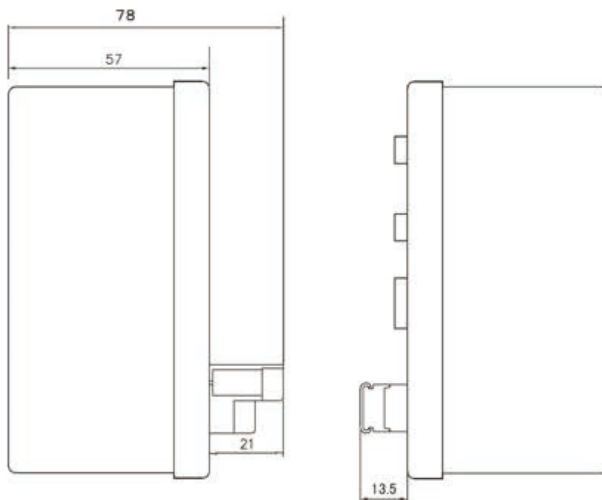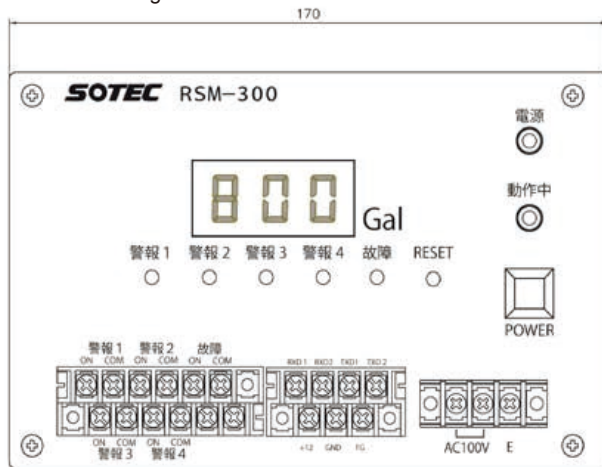
Seismic sensor
PV-24
High-precision observation data with no transmission loss output
by Digital Output

Seismic Sensor Specifications (PV-24)

Method	Electrostatic capacity
Number of components	3 axis (vertical, horizontal, horizontal)
Maximum measurable acceleration	± 4 000 Gal
Frequency range	0.05 Hz to 40 Hz
Self-generated noise level	0.05 Hz to 40 Hz: 1.0 Gal (peak) or less
	0.05 Hz to 40 Hz: Typ.0.4 Gal
	0.3 Hz to 10 Hz: Typ.0.2 Gal
Operation check	Output self check result by built-in CPU to seismometer
	Digital signal output: RS-422 (output X, Y, and Z
	components in series)
Sampling frequency	100 Hz
Power supply	Rated voltage: DC+12 V
	Operating voltage range: DC+9 V to +16 V
Current consumption	45 mA or less
Surge protection	With varistor
Connector	Water resistant peformance IPX8
Working temperature / humidity range	-20 °C to +60 °C
Storage temperature / humidity range	-20 °C to +60 °C 95 % RH or less (non-condensing)
Dimensions	Approx. φ97.5 mm x 44 mm (H)
Weight	Approx. 450 g
Applicable standards	Laws and regulations concerning degrees of protection
	provided by enclosures (IP Code)
	Equivalent to JIS C 0920:2003 IPX8 (Test conditions:
	2 atmospheres, 24 hours)

Sample system configuration

PV-24	RSM-300	Indicator lamp

Interface converter

Computer | Mail server | Smart phone
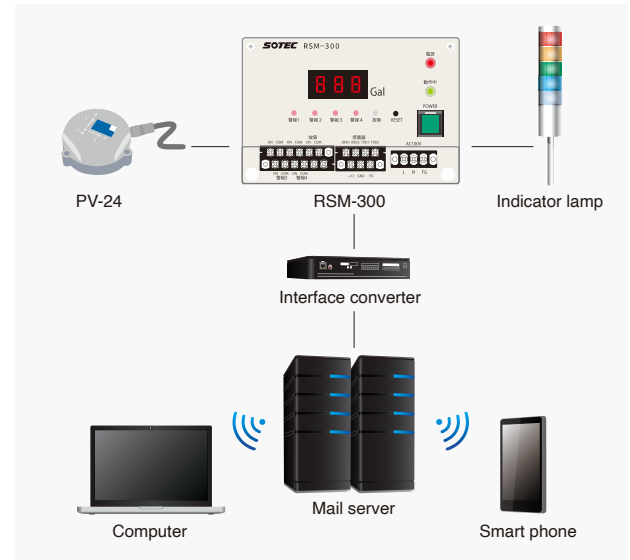
[*]RSM-300 is the seismometer of SOTEC Ltd. which is dedicated for RION PV-24.

[*] Windows is a trademark of Microsoft Corporation.   [*] Specifications subject to change without notice.

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