



SW-54 & SW-52 Specifications

► Specifications Processing Unit (SW-54)

Item		Specification
Display element		STN monochrome LCD with touch switch/back light color: green/orange/red
Display contents	Earthquake monitor display	Present time
	Earthquake generation display	Earthquake generation time, maximum acceleration, seismic intensity scale, alarm operation
	Alarm hold display	Above + reset button (whole reset of alarm/buzzer)
	Setting display	Trigger, alarm, date and time
	Maintenance display	Pickup test, earthquake history
Alarm and buzzer		Upper limit 3-step (ALM1-3), individual setting, buzzer for point, Alarm setting value: 0.1 to 999.9 (gal/seismic intensity scale/Kine) Setting interval: 0.1 step, 0.0 is alarm operation OFF (seismic intensity scale alarm is set by instrumental seismic intensity value)
Extra alarm	Alarm step	Upper limit 7-step (ALM4-10), individual setting (acceleration/seismic intensity scale/SI value/any setting is possible)
	Alarm setting value	0.1 – 999.9 (gal/seismic intensity scale/Kine) setting interval 0.1 step, 0.0 is alarm operation OFF (seismic intensity scale alarm is set by instrumental seismic intensity value)
	Alarm contact	1a contact (photo MOS relay) independent COM 2-point (ALM1-5, ALM 6-10, each 1-point)
	Contact rating	200 V – 0.65 A (AC/DC, peak value)
Alarm and buzzer reset method		a. Automatic reset by an internal timer 1 – 9999 sec. (setting interval 1 sec., 0 is automatic reset OFF) b. External reset terminals (all steps reset by non-voltage [a] contact) c. Reset button on the touch panel (effective on display alarm)
FAULT alarm		(Power failure) 1a/1b contact switching type Contact rating: 2 A 30 VDC (maximum allowable voltage/current: 220 VDC/2 A)
Serial output		For maintenance (conforms to RS232C) : MC1 (switch over) For external display (conforms to RS422) : MC2 For printer (conforms to RS232C) : MC2
Back up unit		Backup time > 10 min. (ready time), charging time < 48 hours (no function at the operation by optional power 24 VDC)
Mounting method		Wall hanging
Operating temperature range		0 to + 50 °C
Operating humidity range		10 to 85%RH (non-condensing)
Power supply		DC24 V ±10%, less than 70 W
Mass		Approx. 3 kg



► Specifications Measurement unit (SW-52)

Item		Specification
Detecting method		Omni-directional, non-directivity detection by vector composed acceleration
Built-in pickup		Force-balance servo type accelerometer
Frequency range		0.3 to 10 Hz $\pm 10\%$
Acceleration range		0 to 5000 gal (3-component vector product) NS/EW direction: ± 3000 gal, UD direction: + 2000 to - 4000 gal
Low pass filter		30 Hz (-3 dB), 4th butterworth
A/D converter		16 bit, 100 Hz sampling
Display		7-segment LED, 4-digit display (xxx.x or xxxx)
Alarm	Alarm step	Upper limit 3-step (ALM1-3) individual setting
	Alarm setting Level	0.1-999.9 gal ^{*1} setting interval 0.1 step, 0.0 is alarm operation OFF
	Alarm contact	1a contact (photo MOS relay, COM common)
	Contact rating	200 V – 0.65 A (AC/DC peak value)
	Relay	Made by Panasonic PD1a type (AQY277A)
Alarm reset method		a. Automatic reset by an internal timer 1-9999 sec. (setting interval: 1 sec., 0 is automatic reset OFF) b. External reset terminals (all steps reset by no-voltage a contact)
DC output		DC4 – 20 mA, load resistance < 300 Ω Full scale: 10 to 3000 gal (setting interval: 1 gal)
Serial I/F		Communication with SW-54 (conforms to RS422) /For maintenance (conforms to RS232C)
Clock	Accuracy	< 70 ppm (daily error of 6 seconds)
	Time calibration	± 30 sec. correction (external input of no-voltage a contact)
Operating temperature range		0 to + 50 $^{\circ}\text{C}$
Operating humidity range		10 to 100 %RH (non-condensing)
Power supply		DC24 V $\pm 10\%$ less than 10 W ^{*2}
Structure		Waterproof (equivalent to IP67)
Material		Aluminum die-casting
Mass		Approx. 1.5 kg
Mounting method		Installation on the ground (fixed by anchor)
I/O cable		Waterproof connector One-touch lock connector (made by Nanaboshi Electric) NRW-2421PF11 (connector diameter: approx. 34.1 mm) Twisted cable with shielded (made by Fuji Electric Wire) FKEV-SB 0.3sq \times 10 pair (outer diameter: approx. 10.5 mm)

*1 Initial setting values are 80, 250, 400 gal

*2 When connected with SW-54, power is supplied from SW-54