NEW
Network Sensor
CV-374A, CV-374B

TS TOKYO SOKUSHIN CO., LTD.
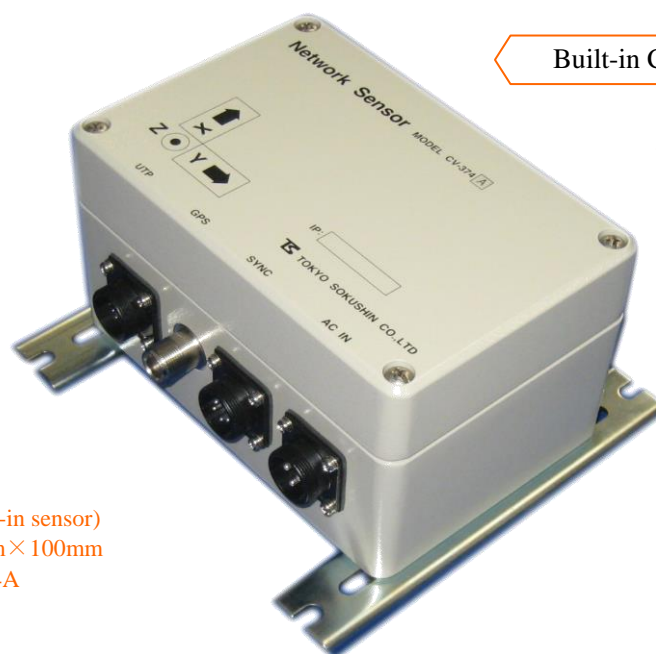
3-14-34, OUGI, ADACHI-KU.TOKYO.
TEL 03-3855-5911 FAX 03-3855-5921
URL http://www.to-soku.co.jp

Earthquake Observation
and Health Monitoring

・All-in-one sensor recording large capacity waveform and LAN connection
・Observation of micro-tremor to strong motion by servo accelerometer
・Recording continuous data and trigger file in a CF card together
・Send seismic information such as maximum value, seismic intensity and predominant period, and waveform data
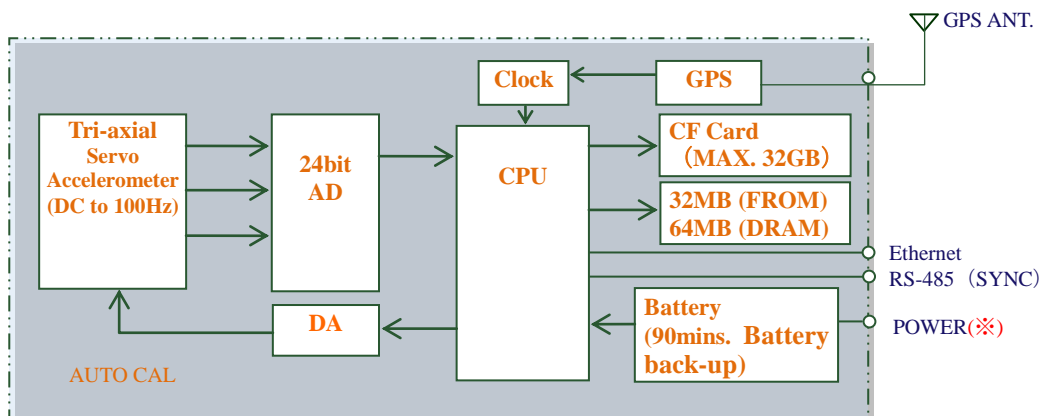・Connect by single LAN cable including power and synchronization (CV-374B)

Built-in CF Card, GPS receiver

Continuous record

Dimension (built-in sensor)
180mm×120mm×100mm
＊Photo. CV-374A

CV-374A : For general network line.
(AC100V power supply is necessary to the main unit)

CV-374B : For exclusive network line by single LAN cable.
(Power supply and various synchronizations from exclusive HUB)

GPS ANT.

Clock ←	GPS
Tri-axial Servo Accelerometer (DC to 100Hz) → 24bit AD → CPU →	CF Card (MAX. 32GB)
	32MB (FROM) 64MB (DRAM)

Ethernet
RS-485 (SYNC)

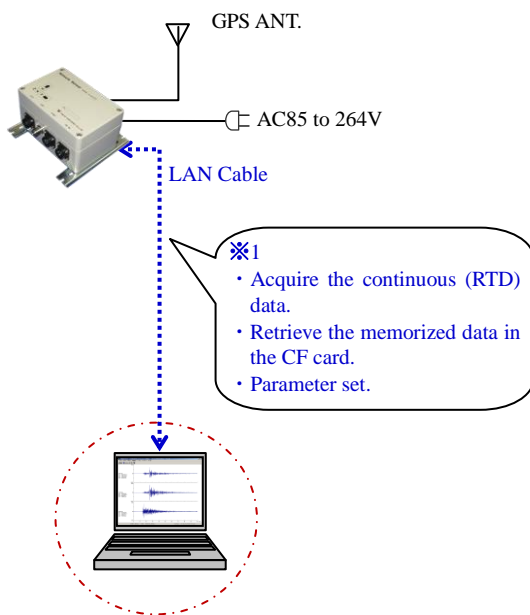DA ← CPU ← Battery (90mins. Battery back-up) ← POWER(※)

AUTO CAL

(※)・CV-374A needs AC100V power supply.
・CV-374B is supplied from Exclusive HUB
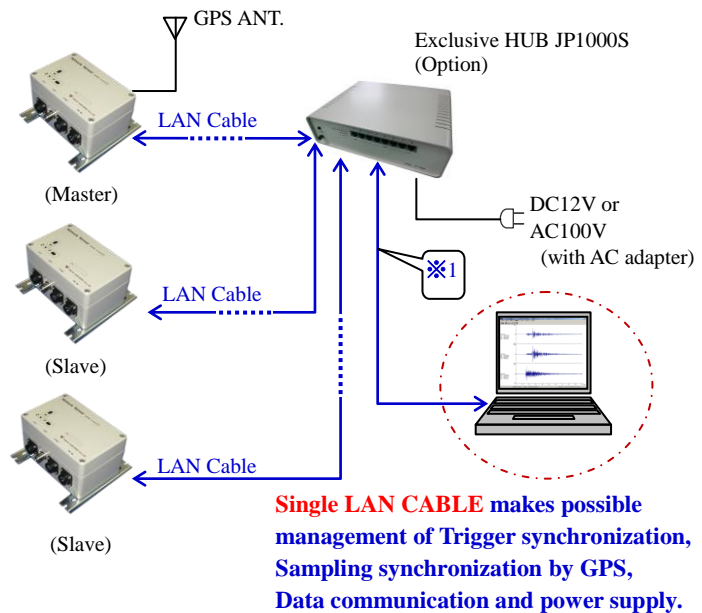
Common Specifications   CV-374A , CV-374B

Analogue, A/D converter	
Input	±4.0V,　±10.0V (Option)
Sampling	100, 200Hz
AD converter	24bit
Resolution	Less than 10mGalp-p (Sampling :100Hz / 2000Gal full scale)

Sensor (option: external sensor)	
Type	Servo Accelerometer
Component	Tri-axial
Full scale	±2000Gal
Bandwidth	DC to 100Hz

Calibration	
Frequency	1Hz
Waveform	Sine Wave (100Gal)

Data record	
Trigger level	0.5 to 100Gal (0.1Gal step)
Trigger logic	OR, AND, 2AND
Pre trigger	1 to 300 sec.
Post trigger	10 to 300 sec.
Trigger data	Approx.160 hours (1 to 10 min./File)
Continuous data	Approx. 480 days (10 min./File) (CF MEMORY 32GB)
Overwrite format	Delete the old data, overwrite the new data
Media	CF card, Max. 32GB FAT32 format
Wave format	WIN32 compliance

Clock calibration	
Accuracy	< ±2.5ppm, -30℃ to +75℃
Clock synchronization	GPS or NTP server Slave unit can adjust by the transfer time code
Clock accuracy	< ±0.62ppm(GPS)
Clock function	Year to Seconds Daily 0.1 second (no GPS, NTP)

Master/Slave function	
Time code	Hour, minute, seconds mark
Port	RS-485, Max. transmission 1km
Data interlock	Trigger data start / stop
Synchronization accuracy	Synchronized within 1msec. (When using exclusive HUB)

Communication	
Ethernet	10base-T or 100base-TX (automatic change)
Port	1 port
Protocol	telnet, ftp, TCP/IP socket

Power supply	
Input	AC100V (85 to 264V) / CV-374A Exclusive HUB / CV-374B
Power consumption	Max.3.6VA (GPS)
Internal battery	Lithium battery 6.8V, 0.9A
Battery backup	Approx. 90 min.

Environment	
Temperature	0℃ to +50℃
Proof	IP65

Dimension and Weight	
Case	Cast Aluminum
Dimension	180mm (W) × 120mm (D) × 100mm (H)
Weight	Approx. 1.5kg
Connector	Water-proof connector

Example of Use

Single point (CV-374A)

GPS ANT.
AC85 to 264V
LAN Cable

※1
・Acquire the continuous (RTD) data.
・Retrieve the memorized data in the CF card.
・Parameter set.

Multi point (CV-374B)

GPS ANT.
(Master)
(Slave)
(Slave)
LAN Cable

Exclusive HUB JP1000S (Option)
DC12V or AC100V (with AC adapter)
※1

Single LAN CABLE makes possible management of Trigger synchronization, Sampling synchronization by GPS, Data communication and power supply.

The specification may change without notification because of the proved product.

TOKYO SOKUSHIN CO., LTD.

Dated: Jan 2015