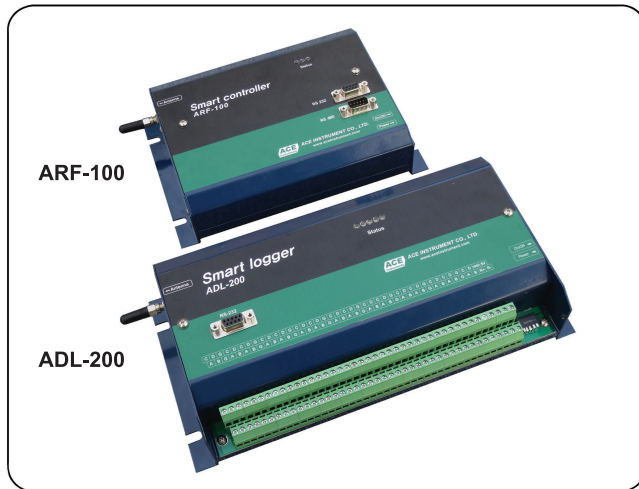


Smart controller



[ADL-200 Configure of collective network / Iran Hirvi Dam site]

Description

ARF-100 smart controller is an integrated controller to connect and operate multiple ADL-200 smart logger.

The one unit of ARF-100 is configured the 7 sets of smart logger (ADL-200) to a network and it can be access and do communication control by wired and wireless.

For a wired communication, the ARF-100 is attached with RS-232, RS-485 port. To connect wirelessly, Zigbee for short range has a built-in wireless modem and an antenna port. Depending on site condition, choose a wired or wireless and configure the network. When communicating with a wireless data communication is possible in the data reaches the maximum distance is 200~600m. In order to connect the controller to the computer, the ARF-100 can be equipped with a 3G modem for wireless remote control is available.

Depending on quantity of sensor at medium field, connecting the 7 sets of smart logger (ADL-200) in the 1 set of smart controller (ARF-100) may control the sensors of 112ch. At the large field, when you install the ARF-100 can be increased in multiplex smart loggers and sensors also quantity in multiples.

Using the ARF-100 smart controller of our company, the site such as tunnels, soft ground, large structures, dams, port construction and so on will be useful in difficult cabling while allowing the automated measurement and network configuration. In addition, developed for the operation of civil measurement software is very easy to operate anyone who can only receive training 2-3 hours so convenient compared to the operating software is too difficult for third-party products.

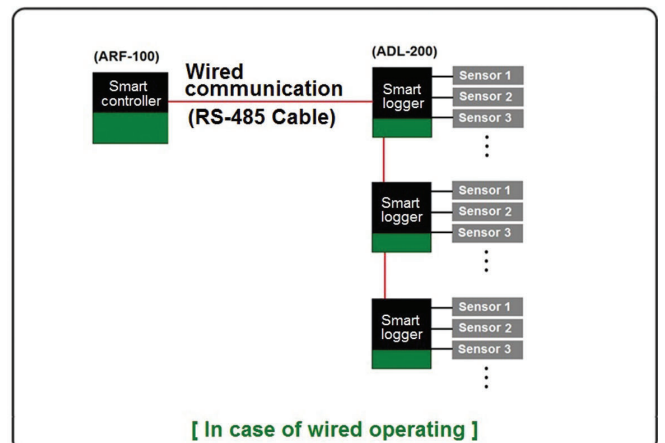
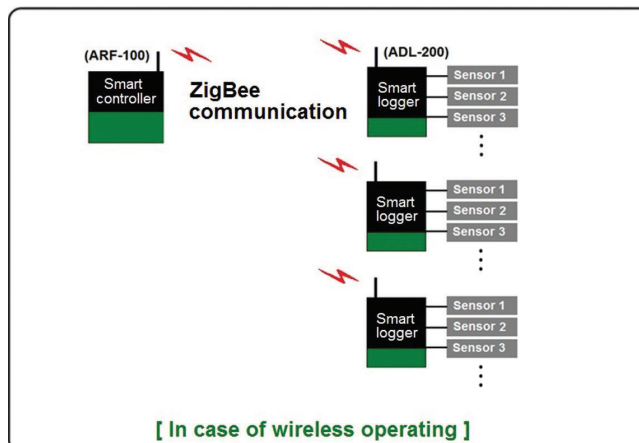
ARF-100 and ADL-200 overcome the line wiring problems will provide a new paradigm of civil measurement in terms of practicality and convenience.

Features

- Tunnel, cable wiring is optimized in difficult site
- Dam sites, optimization of collective site management

Applications

- Real-time data required
- Restricted entrance of worksite
- Monitoring by simultaneous access



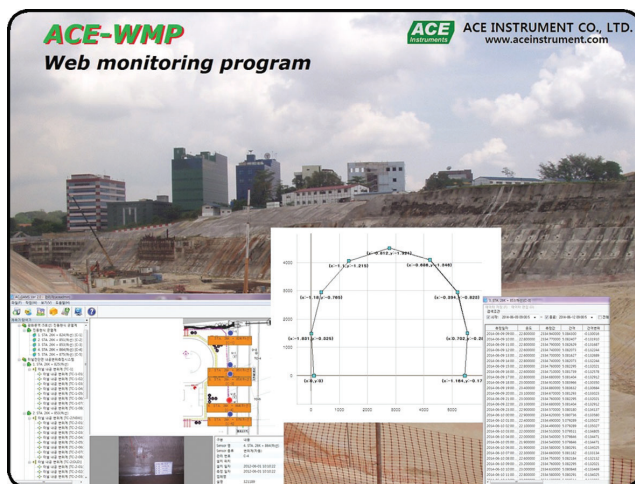
[Connecting the 7set of Smart logger(ADL-200) to wired and wireless networks into the 1set of Smart controller can operate the automated system]

Smart controller

Specification

Model		ARF-100 (Smart controller)	ADL-200 (Smart logger)
Power source		DC 12V	
Operating temperature		-20~70°C	
Voltage consumption		Standby : Less than 35mA, RS-485 Communication : Less than 100mA, ZigBee wireless communication : Less than 250mA	
Date memory		256 MByte (On board flash) / 480,000 Points	64 MByte (On board flash) / 120,000 Points
Analog sensor (mV, mA sensor)	Resolution	16 Bits	
	Accuracy	0.05% FSR	
	Channel	16ch (ADL-200) × 7set = 112ch	16ch (Thermistor, foil strain gage, capacitive sensor etc) optional
Digital sensor (VW sensor)	Frequency	0~15 kHz	
	Resolution	0.01%FSR (0.1 Hz)	
	Accuracy	0.05% FSR	
	Channel	16ch (ADL-200) × 7set = 112ch	16ch
Communication standard	Frequency	2.4 GHz	
	Communication speed	38,400 bps	
	Communication range	200m ~600m(Depend on the environment)	
	Wireless communication(Site)	ZigBee method (Controller - Smart logger)	
	Wired communication(Site)	RS-232 :1 port, RS-485 : 1 port (Controller - Smart logger)	
Antenna	Helical antenna or patch antenna (Controller - Smart logger)		
External modem		3G (Controller - Computer)	
Dimensions		217 × 144 × 48mm	293 × 142 × 58mm
Weight		0.5 kg	1.2 kg
Hour of consecutive use		Battery for car : RS-485 communication Continuous over 20 days ZigBee communication Continuous over 7 days After full charged the 200W solar panel : ZigBee communication Continuous over 5 days	

Web program



Web managing program as ACE-WMP is available graph frontier, report creation and modification, alarm, real-time measurement data retrieval. It is based on the data stored in the server computer throughout all kind of static sensors.