Remote Monitoring System for Data Logger and Transmission Unit

<i-sensor²</i> Logger

<Abstract>

<i-sensor²</i> (Intelligent-SENSOR²) Logger is data logger and transfer unit with a wide variety of input functions. This logger has a wireless-link function to aggregate monitoring data into the main logger and a function of transmitting the monitoring data by GSM/GPRS.

Splash-proof housing and lithium batteries are adopted and a storage box is not necessary. Installation work becomes easier and it leads to saving cost by reducing work load and time.

There are 2 types of the logger consisting of main [M4] and sub [S4], and deployment plan can be easily / flexibly arranged depending on site conditions.

<Features>

- Compact body with batteries contained and un necessity of a storage box
- 2 types of wireless function, mobile phone network and 2.4 GHz wireless-link
- The main [M4] being linkable up to 3 subs [S4]
- Saving work cost and communication charge by reducing installation time and transmitting monitoring data by aggregating between several loggers
- Connecting analog sensor, S&DL series (digital sensor) and rain gauge (pulse output)
- Threshold judgment function with being changeable measurement and transmitting interval automatically
- Retrieving data with SD card instead of data transmitting in case of some communication failure
- Synchronizing time and acquisition of its position roughly by GPS
< Specification >

○ Data Logging
  Analog input : 4ch
  (Voltage and current input are switchable)
  Voltage input range: +/-2.5 V, +/-5 V (switchable)
  Current input range: 0 to 25 mA
  Digital input : 1ch
  (RS232C port for connection with S&DL series)
  Contact input : 3ch
  Contact output : 3ch (non-voltage contact)
  Pulse input : 1ch
  (Tipping bucket type rain gauge)
  Connectable number of wireless-link : Up to 3 units

○ Interface
  USB : USB2.0 x 1 port
  (For conversion port between USB and RS232C)
  Memory card : SD-card, SDHC-card
  Communication : SIM-card (GSM/GPRS)

○ Communication
  Packet communication : GSM/GPRS
  Wireless-link : 2.4 GHz, Smart Mesh IP
  Time & position : GPS

○ Power Source
  Input voltage : DC+6 V to DC+15 V

○ Data Logger
  Data storage capacity : approx. 25,000 data
  (The capacity is depending on measurement items)

○ Housing
  Protection grade : Splash-proof

○ Outer Dimension
  Outer size : φ85 x 395 mm
  (Excluding projections)
  Weight : approx. 1.5 kg
  (Excluding internal battery)

[Image of Configuration: communication & wireless-link path]