



DL8 Web Data Logger for IoT



Abnormality Notification

P.6



Remote Monitoring/ Operation

P.8

Labor-Saving Maintenance

P.14

Illustrated Application Examples



Predictive and Preventive Maintenance

P.10

Remaining Amount Management of Stored Liquids

P.12

What is IoT? Internet of Things

IoT, in industrial applications, is a technique for remote awareness of the operational status of machines and devices by connecting them to the Internet.



DL8 Series
Web Data Logger



MG CO., LTD.
(formerly M-System Co., Ltd.)
www.mgco.jp

Make Greener automation



Internet of Things

IOT

That Can Be Implemented Right Now

Tasks of DL8

An abnormality is alerted by email.

Measurement data can be downloaded from the DL8.

You can use your smartphone to view necessary information.

5 Reporting by email

3 Sending measurement data

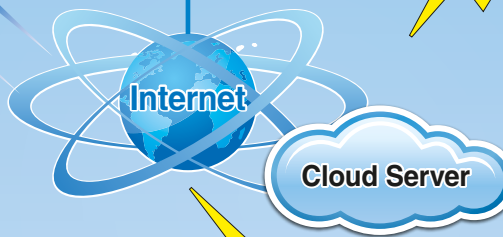
2 Displaying measurement data



PC



Smartphone



Measurement data can be sent to a cloud server and the like.

3 Sending measurement data

5 Tasks of DL8

1 Storing measurement data

2 Displaying measurement data

3 Sending measurement data

4 Enabling remote operation

5 Reporting by email



Mobile Router



DL8

The DL8 accumulates data on-site by an SD card.

1 Storing measurement data

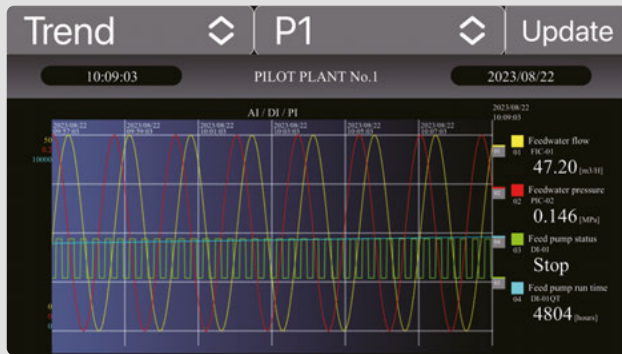
Measurement Signal
Control Signal

On-site measurement data can be viewed on a smartphone anywhere, anytime.

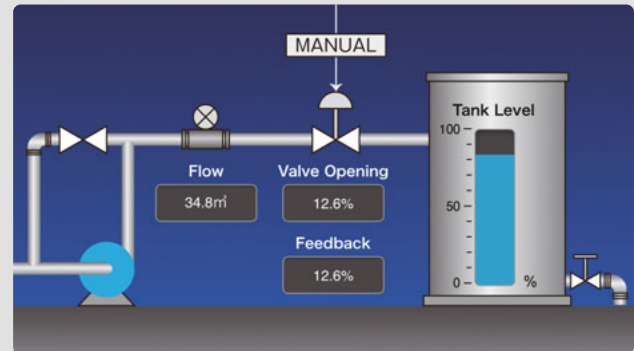


Display Examples of PC/Smartphone

Trend view



Graphic view can be also created.



Remote operation from a PC/smartphone

Ch	Name	Comment	Status	Signal	ON	OFF
2001	Feed pump control	DO-01	ON		ON	OFF
2002	Discharge pump control	DO-02	ON		ON	OFF
2003	Intake damper control	DO-03	OFF		ON	OFF
2004	Exhaust damper control	DO-04	OFF		ON	OFF
2005	DI		Alarms OFF		Alarm ON	Alarm OFF
2006	DO		Alarms OFF		Alarm ON	Alarm OFF
2007	AI		Alarms OFF		Alarm ON	Alarm OFF
2008	AO		Alarms OFF		Alarm ON	Alarm OFF

Remote output can be controlled from your smartphone.



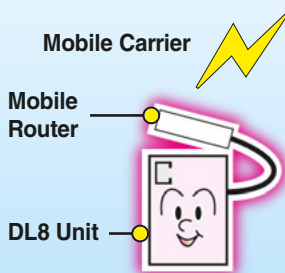
Convenient event history screen

Time	Ch	Name	Comment	Event/Status	Signal
2015/03/31 13:36:01	AR3	Tank water level	LIC-03	Tank empty	
2015/03/31 13:35:57	AR1	Feedwater flow	PIC-01	HH	
2015/03/31 13:34:56	PI4	Energy consumption	WQ-04	Demand Alarm	
2015/03/31 13:34:42	AR2	Feedwater pressure	PIC-02	LO	
2015/03/31 13:34:40	PQ1	Feedwater flow Q	FQ-01	9999 counts	
2015/03/31 13:34:21	AR3	Tank water level	LIC-03	Tank empty	
2015/03/31 13:34:17	AR1	Feedwater flow	PIC-01	HH	
2015/03/31 13:33:25	PI4	Energy consumption	WQ-04	Demand Alarm	
2015/03/31 13:33:02	AR2	Feedwater pressure	PIC-02	LO	
2015/03/31 13:33:00	PQ1	Feedwater flow Q	FQ-01	9999 counts	
2015/03/31 13:32:41	AR3	Tank water level	LIC-03	Tank empty	
2015/03/31 13:32:37	AR1	Feedwater flow	PIC-01	HH	
2015/03/31 13:31:54	PI4	Energy consumption	WQ-04	Demand Alarm	
2015/03/31 13:31:22	AR2	Feedwater pressure	PIC-02	LO	
2015/03/31 13:31:20	PQ1	Feedwater flow Q	FQ-01	9999 counts	
2015/03/31 13:31:01	AR3	Tank water level	LIC-03	Tank empty	
2015/03/31 13:30:51	AR1	Feedwater flow	PIC-01	HH	

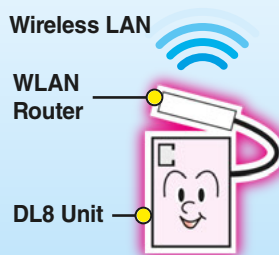
4 Enabling remote operation

In this brochure, variations of the DL8 character are introduced in combination with different types of routers.

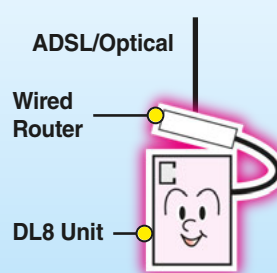
Mobile Router



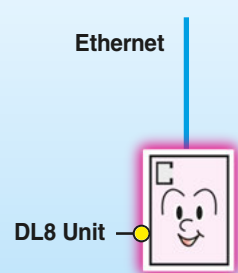
WLAN Router



Wired Router



Wired Internet LAN



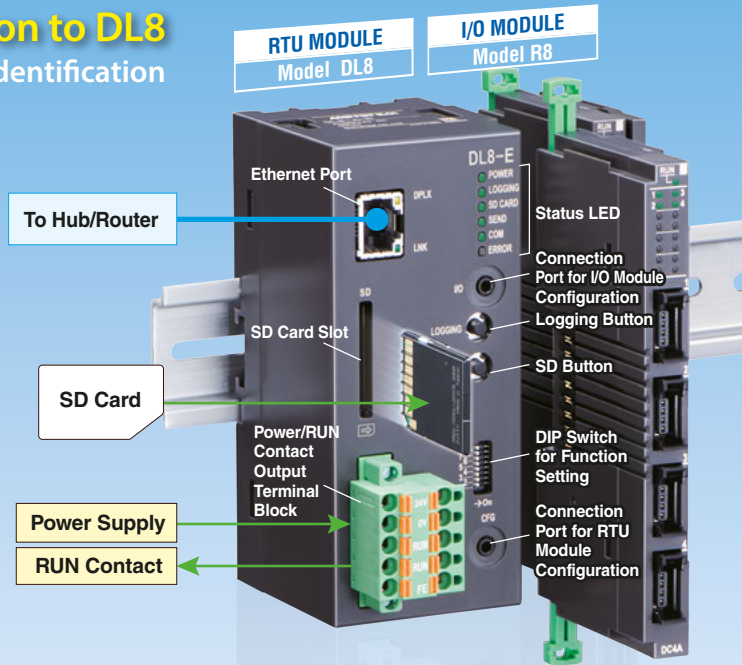


Internet of Things

IOT

That Can Be Implemented Right Now

Introduction to DL8 Component Identification



I/O MODULE

A wide selection of 12-mm or 24-mm wide, slim I/O modules are available.



I/O MODULE

Signal Type	Max. Capacity* per module	Function	Model
Analog input	32 points	DC current input (2 points, isolated)	R8-SS2
		DC current input (4 points, non-isolated)	R8-SS4N
		DC current input (4 points, non-isolated, sensor exc.)	R8-SS4NJ
		DC current input (8 points, isolated, tension-clamp terminal block)	R8-SST8
		DC voltage input (2 points, isolated)	R8-SV2
		DC voltage input (4 points, non-isolated)	R8-SV4N
		Thermocouple input (2 points, isolated)	R8-TS2
		RTD input (4 points, non-isolated)	R8-RS4N
		DC voltage/current input (4 points, non-isolated, sensor exc., tension-clamp terminal block)	R8-FST4N
		DC voltage/current input (16 points, non-isolated, sensor exc.)	R8-FS16N
Discrete input	64 points	Contact input (4 points, NPN)	R8-DA4A
		Contact input (16 points, NPN)	R8-DAM16A
		Contact input (8 points, NPN, tension-clamp terminal block)	R8-DAT8A2
		Contact input (16 points, NPN, tension-clamp terminal block)	R8-DAT16A2
		Contact input (8 points, PNP, tension-clamp terminal block)	R8-DAT8B2
Pulse input	32 points	Totalized pulse input (4 points, NPN/PNP/voltage pulse)	R8-PA4
		High-speed totalized pulse input (4 points, NPN)	R8-PA4F
AC power input	32 points	AC current input (4 points, non-isolated, clamp-on current sensor)	R8-CT4E
Analog output	32 points	DC voltage output (4 points, non-isolated)	R8-YV4N
		DC current output (4 points, non-isolated, tension-clamp terminal block)	R8-YST4N
		DC current output (2 points, non-isolated, sensor exc.)	R8-YS2NJ
		DC current output (2 points, isolated)	R8-YS2
Discrete output	64 points	Transistor output (4 points, NPN, shortcircuit protection)	R8-DC4A
		Transistor output (4 points, NPN, voltage contact, shortcircuit protection)	R8-DC4A2
		Photo MOSFET relay output (4 points)	R8-DC4C
		Relay output (4 points, tension-clamp terminal block)	R8-DCT4D
		Transistor output (16 points, NPN, shortcircuit protection)	R8-DCM16A
		Transistor output (16 points, NPN, shortcircuit protection, full interlock)	R8-DCM16ALZ
		Transistor output (16 points, NPN, shortcircuit protection, full and individual interlock)	R8-DCM16ALK
		Transistor output (16 points, NPN, shortcircuit protection, full and partial interlock)	R8-DCM16ALH
		Transistor output (32 points, PNP, shortcircuit protection)	R8-DCM32B2
		Transistor output (8 points, NPN, shortcircuit protection, tension-clamp terminal block)	R8-DCT8A2
		Transistor output (16 points, NPN, shortcircuit protection, tension-clamp terminal block)	R8-DCT16A2
Transistor output (8 points, PNP, shortcircuit protection, tension-clamp terminal block)	R8-DCT8B2		
Pulse output	32 points	Pulse output (4 points, open collector)	R8-PC4A

POWER SUPPLY MODULE

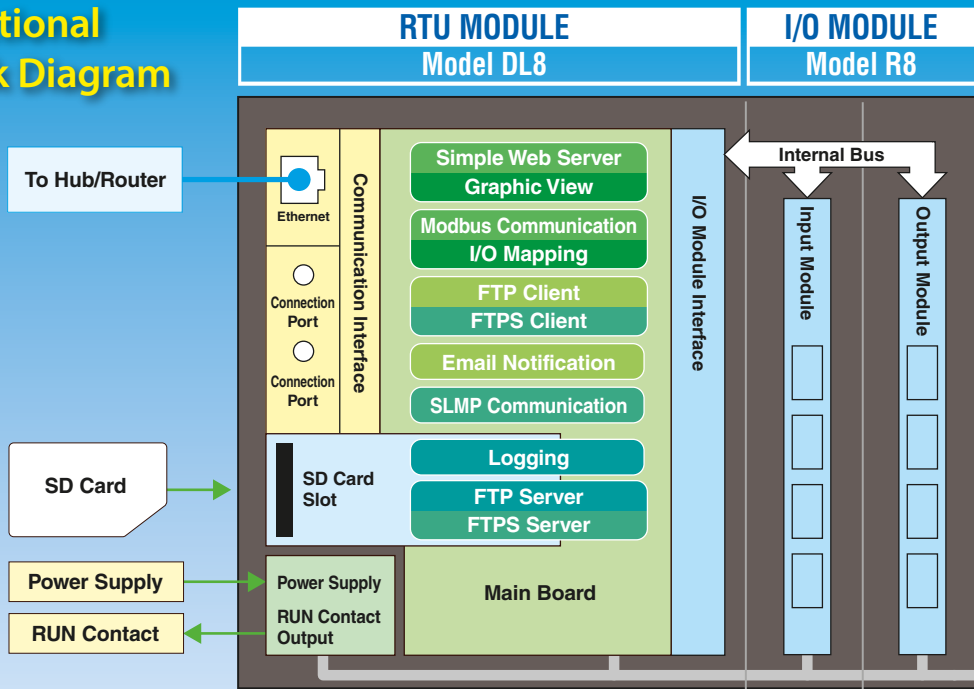
Function	Model
Power supply module for extension	R8-PS1

* Including extended remote I/Os

On-site measurement data can be viewed on a smartphone anywhere, anytime.



Functional Block Diagram



Remote Setting
More Info in Page 19

All setting parameters except the communication setting are easily set and changed via the Internet.

RTU MODULE

Five types selectable by usable functions



DL8-Type	Browse	Report	Log	I/O Marshalling Advanced View	Advanced Communication	Model
A	<input type="radio"/>	—	—	—	—	DL8-A
B	<input type="radio"/>	<input type="radio"/>	—	—	—	DL8-B
C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	—	—	DL8-C
D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	—	DL8-D
E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	DL8-E

Function Description of DL8

DL8-Type					Function	Details
A	B	C	D	E		
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Simple Web Server	Allows data browsing and operation from the browser screen of a smartphone or PC.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Modbus Communication	Interfaces the I/O data of the remote I/O.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	FTP Client	Sends data to a server on the Internet.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Email Notification	Automatically reports alarms and events by email.
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Logging	Stores the data collected at a constant cycle to SD card.
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	FTP Server	Sends the data stored in the memory to FTP client over the Internet.
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Graphic View	Can provide original graphic views defined by the customer.
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I/O Mapping	Assigns Modbus/TCP signals to specific terminals of remote devices.
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Encrypted Communication	Performs encrypted communication by using HTTPS and FTPS protocols.
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	SLMP Communication	Collects data from a PLC using SLMP client function.

Abnormality Notification

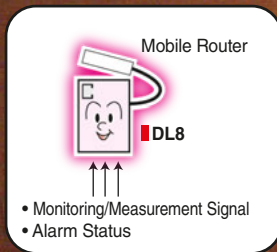
The abnormality notification is a function that monitors a machine or device and sends notification by email when abnormality occurs.



PC



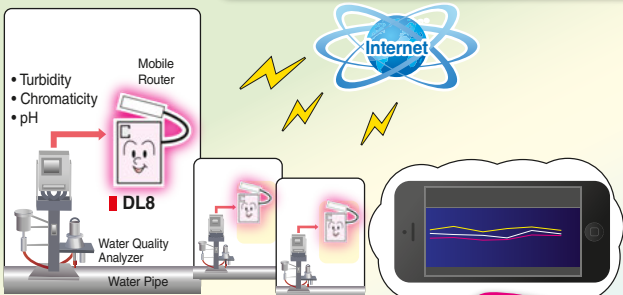
Smartphone



Fire Truck

Water Quality Analyzer

System Configuration Page 16 No.2



No more need for going the round. I will receive email when there is even 1 case of abnormality.



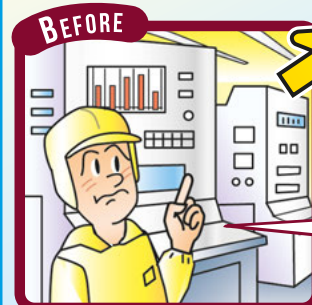
Off to go the round for water quality monitoring!

Cleanroom

System Configuration Page 17 No.6



I can be easy in my mind because I receive email report every hour.



Abnormality may occur! I cannot leave the place.

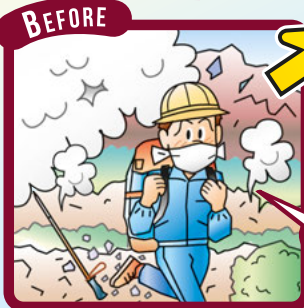
Volcanic Gas Detection

System Configuration Page 16 No.1



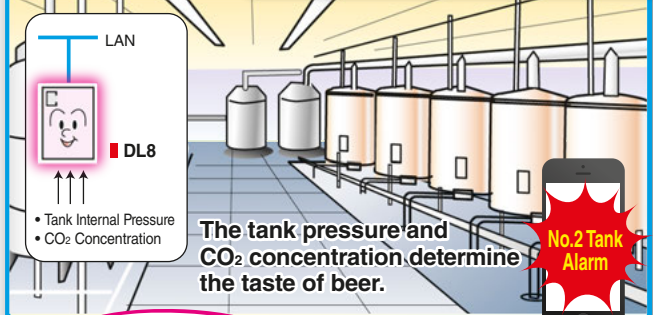
Owakudani Valley, Hakone Mountain

If gas is detected, email and data are sent.



Microbrewing

System Configuration Page 17 No.6



The tank pressure and CO₂ concentration determine the taste of beer.

No.2 Tank Alarm

I can be easy in my mind because I receive email automatically when any of the tanks show abnormality.



Landslide Hazard

System Configuration Page 16 No.1



I will receive email when the rainfall exceeds the set value.



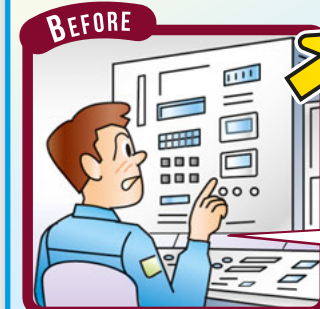
Extra-High Voltage Substation

System Configuration Page 17 No.6



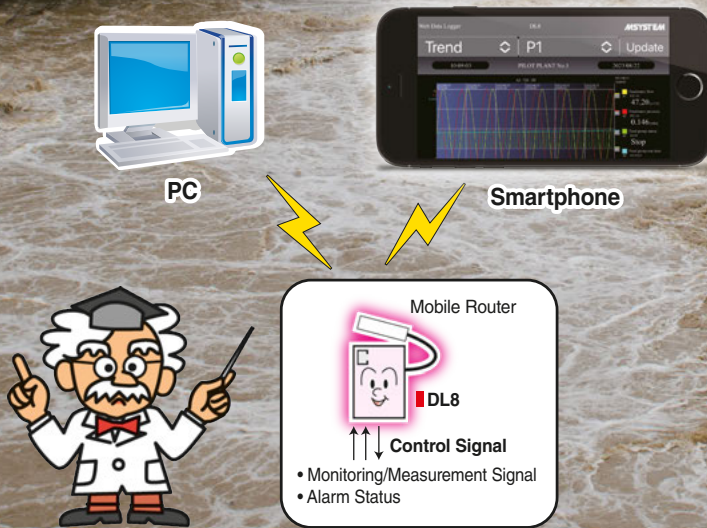
Abnormality notification! Hurry to the site!

Alarm



Remote Monitoring/Operation

You can monitor and operate widely distributed machines and devices on the Internet without having to go to the site.



Dam

Greenhouses

System Configuration Page 16 No.2

Greenhouses located more than 10 km away

Mobile Router

DL8

- Indoor Temperature
- Outdoor Temperature

Measurement Data Abnormality Notification Email

BEFORE

It's hard to go around so many greenhouses for checking temperature...

AFTER

I can relax in spa as far as I have my smartphone to watch over my greenhouses.

Manhole Pump

System Configuration Page 16 No.1

Mobile Router

DL8

Field Panel

- Water Level
- Influent Flow Rate
- Effluent Flow Rate
- Operation Signal
- Breakdown Signal

Influent Pipe

Discharge Pipe

Manhole Pump

Internet

PC

ABC Street A-3

BEFORE

Telemetry Device

Connection Fee

AFTER

The hardware and communication costs are reasonable, it's such a life-saver!

Hard Wiring

Internet

The expensive initial and running costs are such a burden...

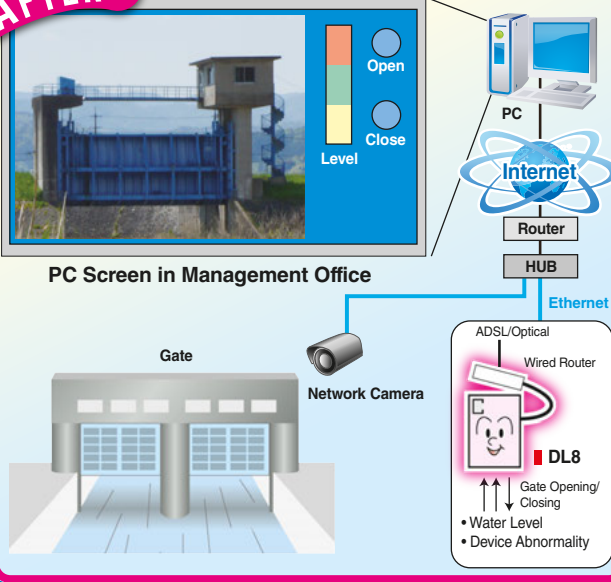
Irrigation Channel Gate

System Configuration Page 16 No.3

It's so convenient when it rains heavily that we can control the gate from the management office.

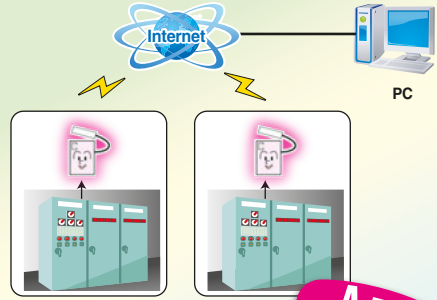
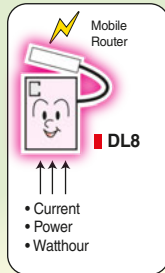


AFTER



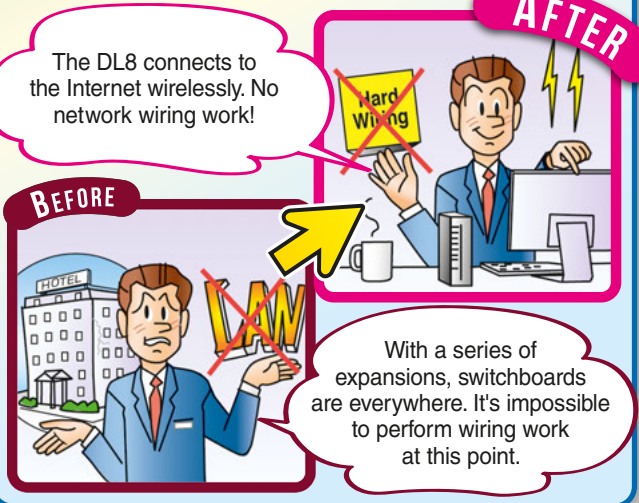
Power Monitoring of Resort Hotel

System Configuration Page 16 No.1



The DL8 connects to the Internet wirelessly. No network wiring work!

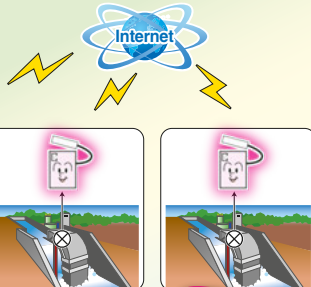
AFTER



Micro Hydropower Generator

System Configuration Page 16 No.1

- Watthour
- Influent
- Flow Rate
- Abnormality Contact



I can manage now all generators without leaving the place.

AFTER

BEFORE

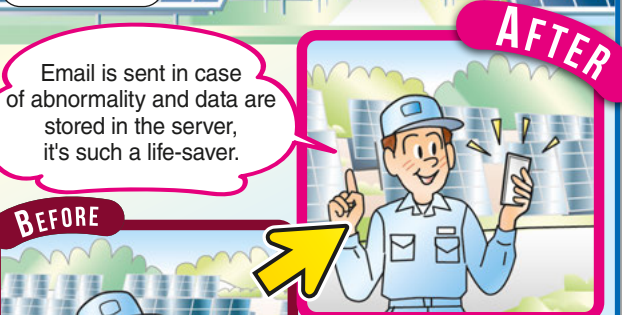


It's such a hard work traveling to inconvenient generator sites...

Solar Power Generation

System Configuration Page 16 No.1

- Generated Power
- Solar Radiation Intensity
- Ambient Temperature



Email is sent in case of abnormality and data are stored in the server, it's such a life-saver.

AFTER

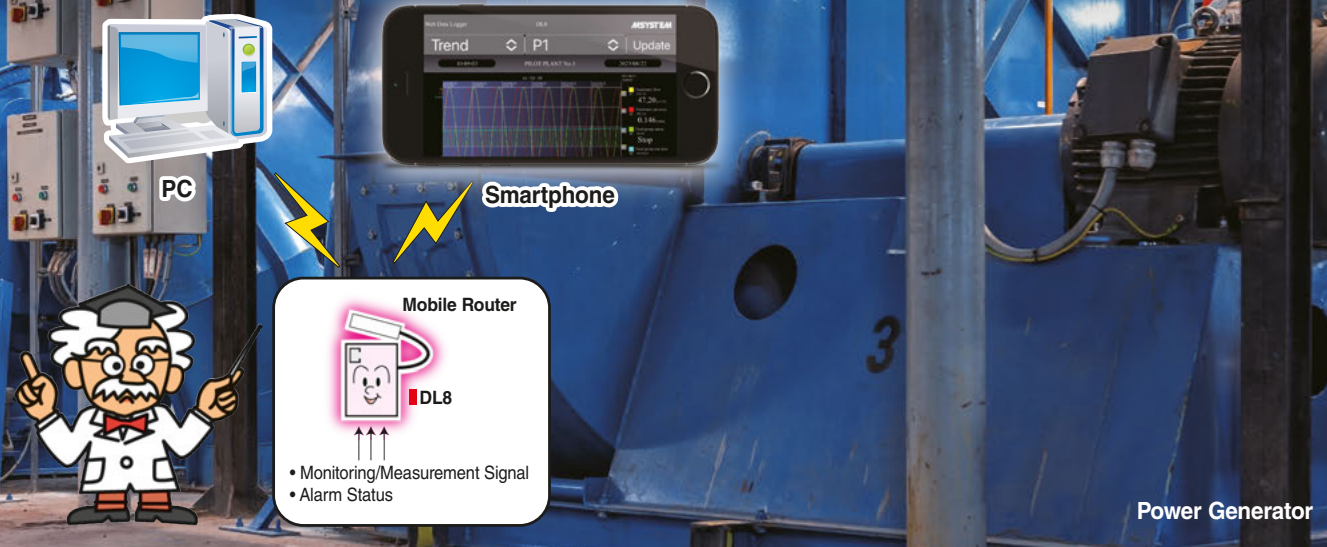
BEFORE



It's hard checking around the vast mega solar site!

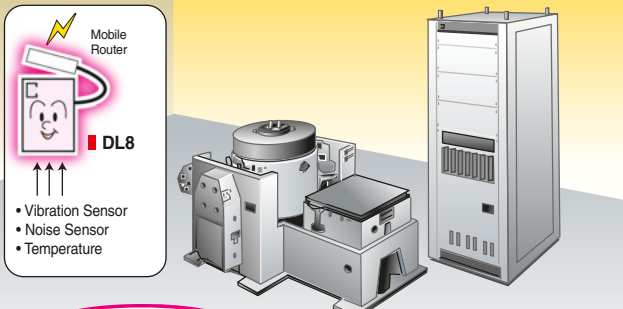
Predictive and Preventive Maintenance

Determining the degree of wear by storing the measurement data of machines and devices in the server via the Internet and LAN prevents problems in advance.



Vibration Test Systems

System Configuration Page 16 No.1



We see a sign of degradation from the data. Let us schedule a maintenance visit.

Manufacturer



BEFORE



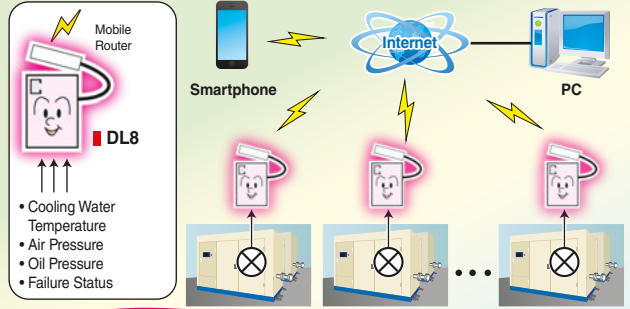
User

I can hear a strange sound. Come look at it right now!

AFTER

Compressors

System Configuration Page 16 No.4



We see a sign of degradation from the data of Compressor No.4. We should discuss a next overhaul.

Manufacturer



BEFORE



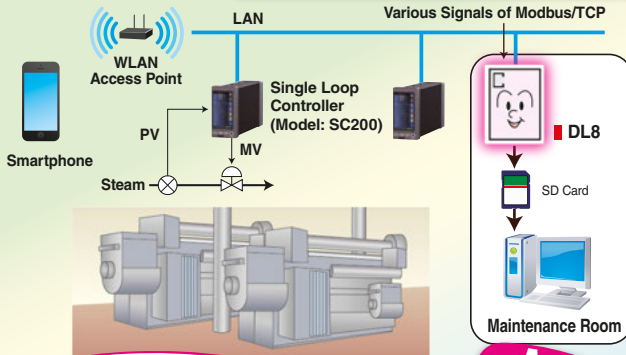
User

Compressor No.4 is acting funny! Come to check it out right away!

AFTER

District Heating/Cooling

System Configuration Page 17 No.7



We see a sign of degradation from the data. Let us schedule a maintenance visit.

Manufacturer AFTER



I think the fuel consumption is getting worse... What's going on?

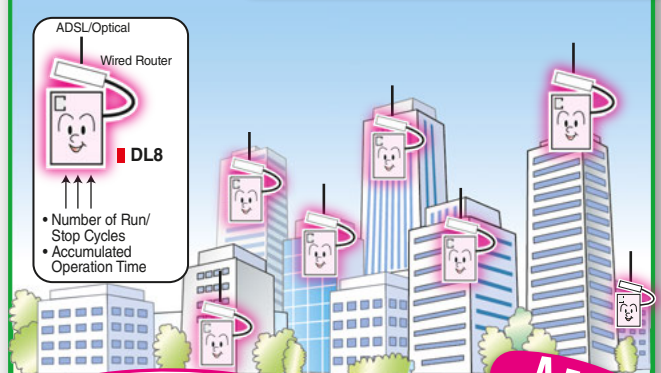
BEFORE



User

Building Maintenance

System Configuration Page 16 No.3



We see an abnormality of cold water pump from the data. Let us schedule a maintenance visit.

Manufacturer AFTER



I hear noise from the cold water pump! Can't you do something?

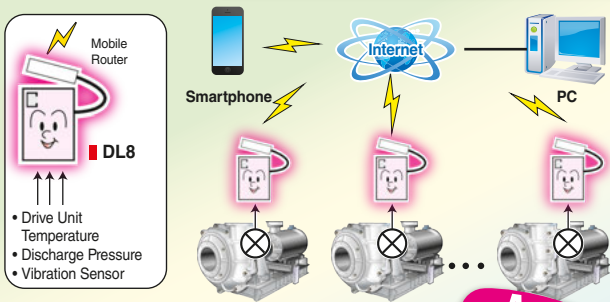
BEFORE



User

Slurry Pump

System Configuration Page 16 No.1



The end of the service life of slurry pump No.4 is approaching. Let us schedule an overhaul.

Manufacturer AFTER



The noise of the slurry pump is intense! I wonder if it's all right?

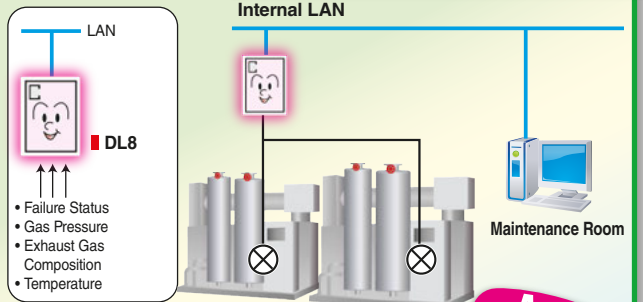
BEFORE



User

Boiler

System Configuration Page 17 No.6



We see from the data that scale has considerably accumulated. Let us schedule a maintenance visit.

Manufacturer AFTER



The thermal efficiency seems to be getting worse lately. We need to get it inspected by an expert!

BEFORE



User

Remaining Amount Management of Stored Liquids

Managing the usage trend and remaining amount of stored liquids in hospitals and factories via the Internet or LAN can prevent raw materials from running out while enabling the delivery plan with increased efficiency.



Gas

System Configuration Page 16 No.1

Mobile Router
DL8

- Level

Now I can see the current level AND the usage trend of each tank.

BEFORE

AFTER

I can see the current values but...

Seasoning

System Configuration Page 17 No.6

LAN

WLAN Access Point

DL8

- Level

I can see the remaining values and the usage trend. It helps me to plan strategically.

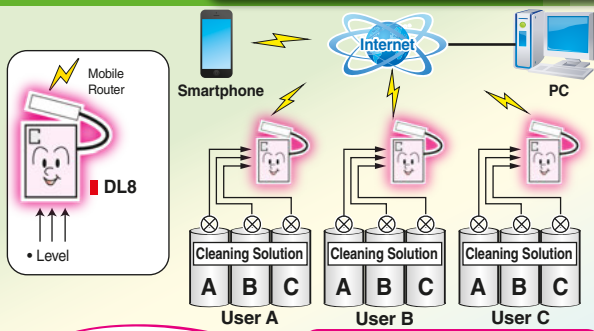
BEFORE

AFTER

Plant must not stop. We need a large warehouse for materials.

Cleaning Solution

System Configuration Page 16 No.1



Now I visit only those places where the material is close to depletion.



AFTER

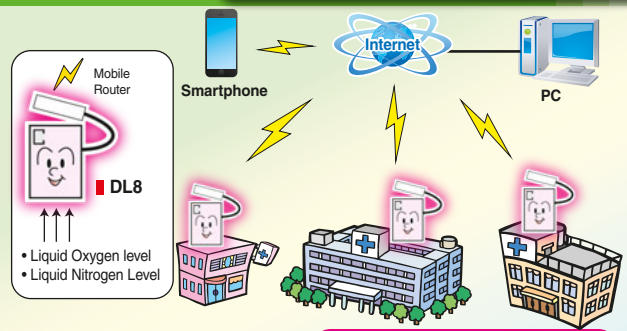
I have to go round every user every day!



BEFORE

Liquid Oxygen/Nitrogen

System Configuration Page 16 No.1



No complaints, thanks to the planned delivery.



AFTER

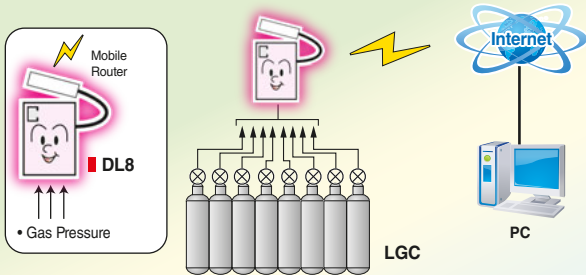
We have only 1 day's remaining amount. Please replenish immediately!



BEFORE

LGC for Factory (Liquid Gas Container)

System Configuration Page 16 No.1



Customers are happy as we can always deliver before the remaining level gets too low.



AFTER

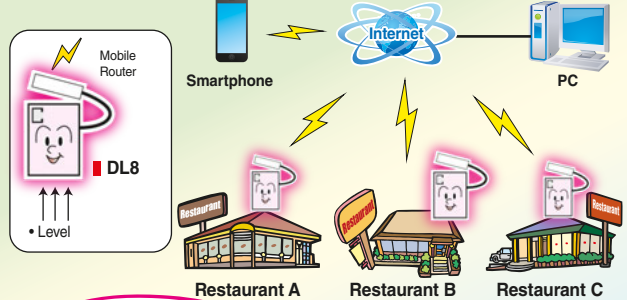
It's a mess! So many phone calls and FAX demanding rush delivery!



BEFORE

Detergent for Chain Restaurant

System Configuration Page 16 No.1



We could cut a significant number of tank trucks because now we can plan daily delivery routes more efficiently.



AFTER

It takes a lot of time to go round every user every day!



BEFORE

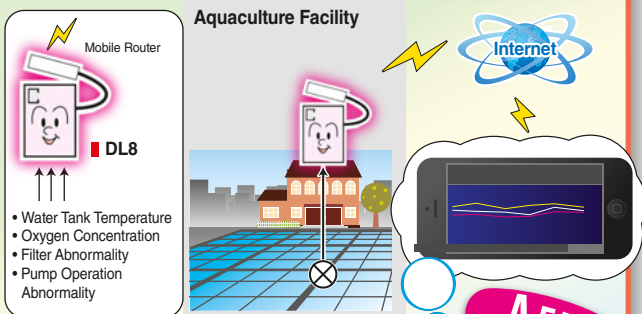
Labor-Saving Maintenance

Maintenance routines can be significantly reduced by connecting machines and devices to the Internet or LAN.

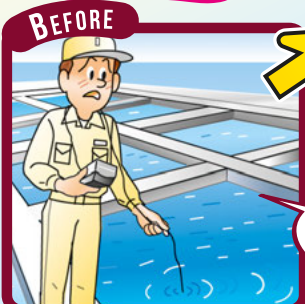


Aquaculture Facilities

System Configuration Page 16 No.1



I can check the temperature and trend of all the measurement points in my office.

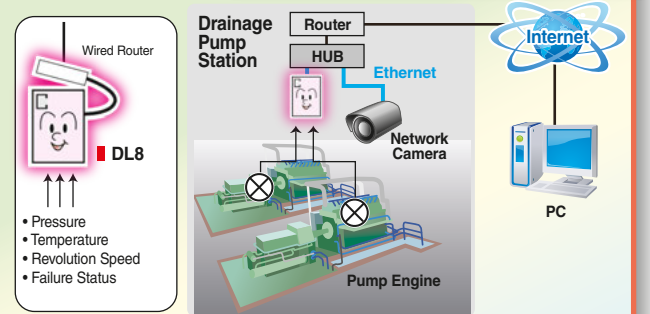


I need to check frequently the dissolved oxygen concentration and temperature.



Engine

System Configuration Page 16 No.3



It is convenient that I can remotely perform test runs of all pump stations and collect operation data.

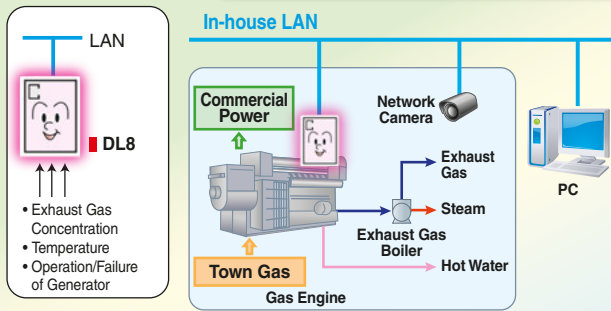


I have to go round every pump station for testing.



Gas generator

System Configuration Page 17 No.6

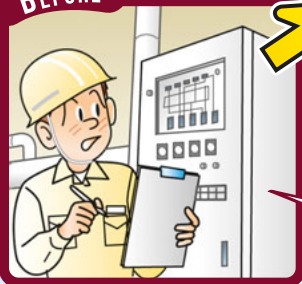


I do not need to go round as I can check the site by the web camera and operation data are stored in the server.



BEFORE

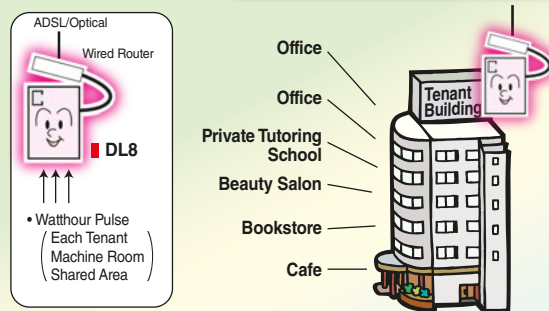
AFTER



It takes a lot of time to go round all the generators every day!

Automatic Watthour Metering of Tenant Building

System Configuration Page 16 No.3



Now all meter values are in the server, and billing and debit transfer is automatic.



BEFORE

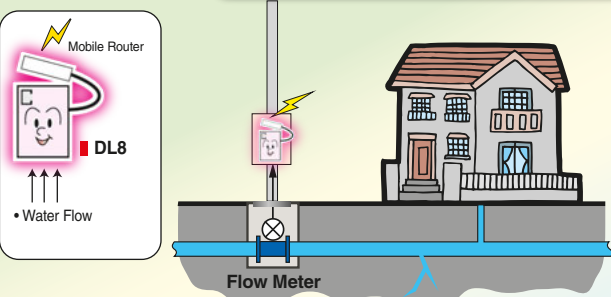
AFTER



It's hard to go around reading the meters every month!

Water Leak Detection

System Configuration Page 16 No.2



We can find leakage points easily by continuously measuring water flow.



BEFORE

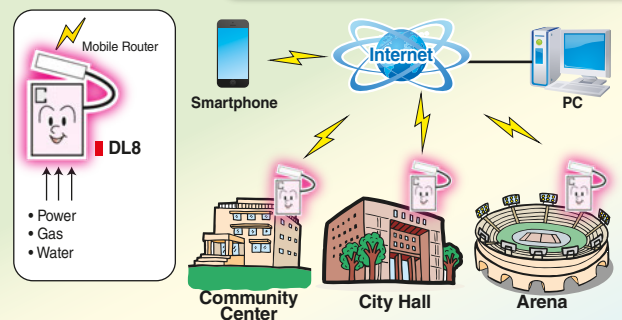
AFTER



Only skilled persons can find the leakage points!

Energy Monitoring

System Configuration Page 16 No.2



We can manage the usage of electricity, gas and water via server over the Internet.



BEFORE

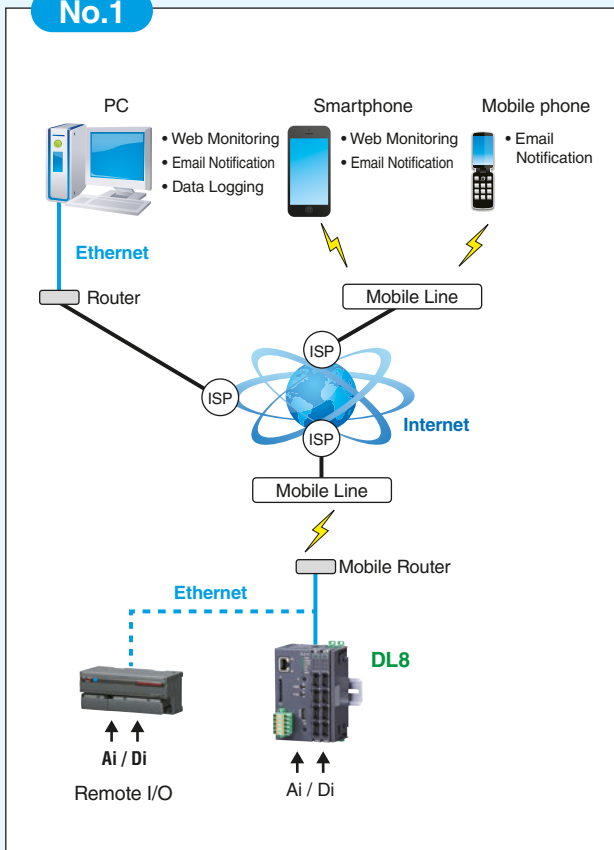
AFTER



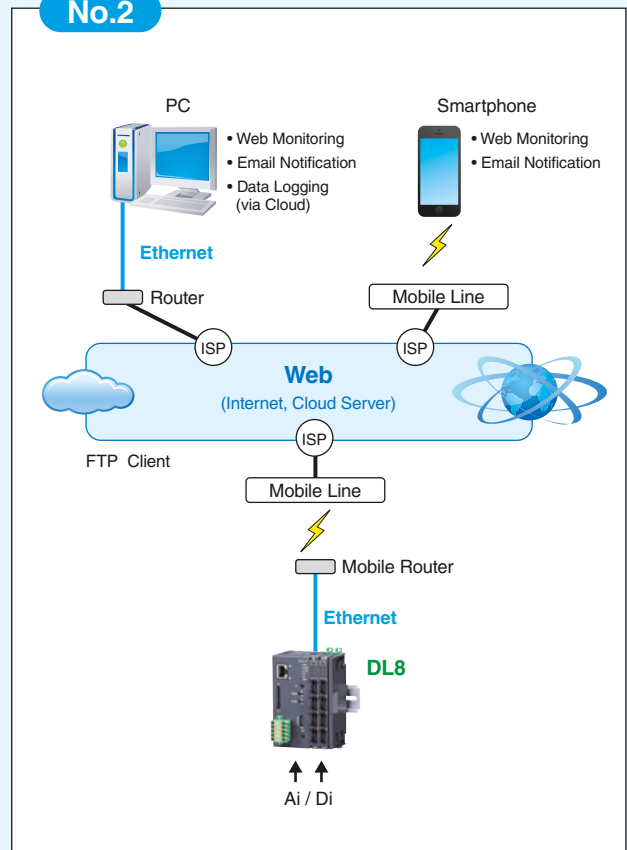
It's hard to go around reading the meters in 600 places!

System Configuration Examples

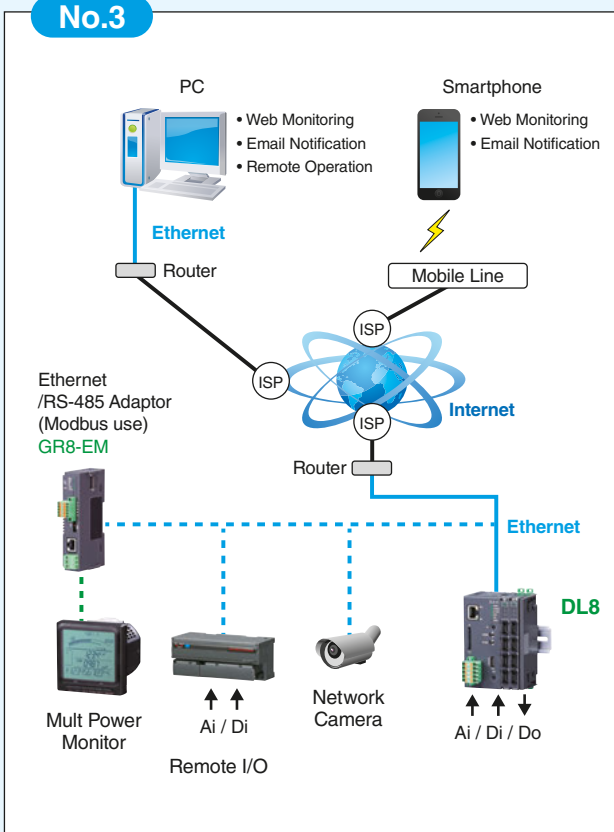
No.1



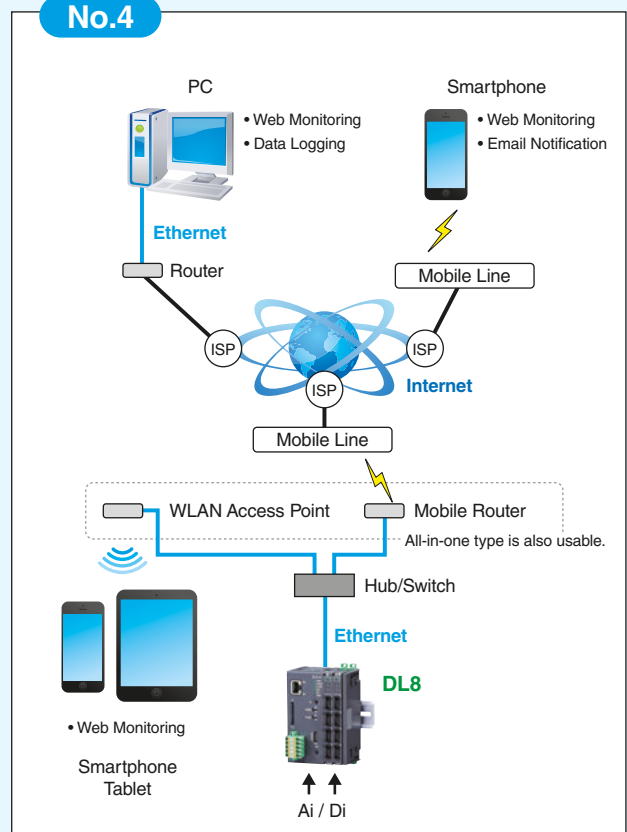
No.2



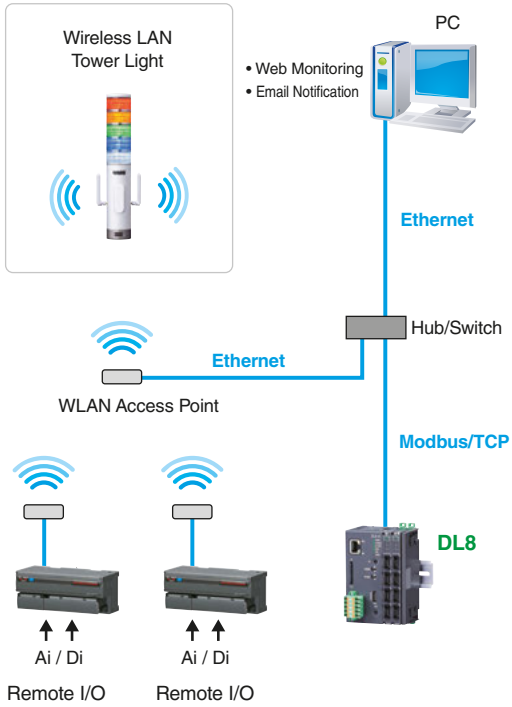
No.3



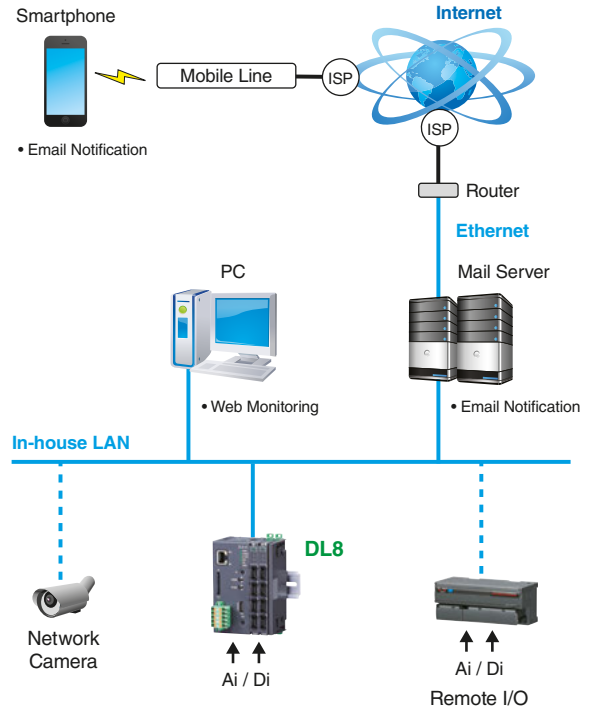
No.4



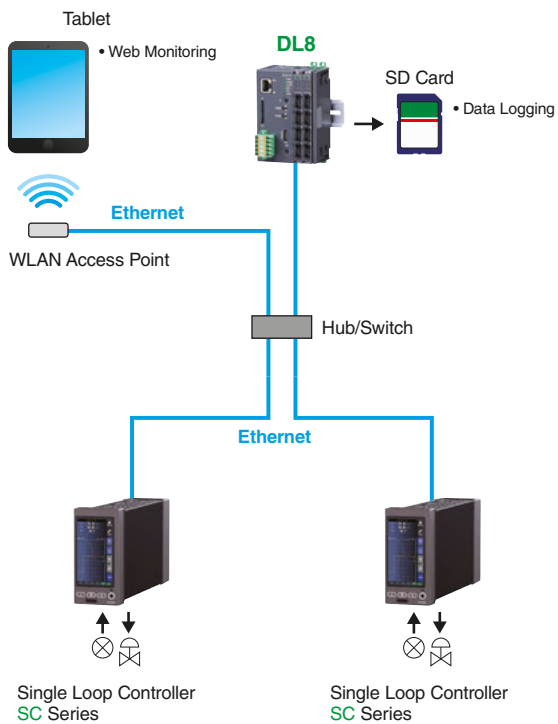
No.5



No.6



No.7



GENERAL SPECIFICATIONS

Max. number of I/O modules: 16
(Max. consumption current of I/O modules: 1.6 A)
Isolation: Ethernet to internal bus or internal power or power supply (exc. supply) to RUN contact output*1 to FE
Calendar clock: Year (4 digits), month, date, day, hour, minute, second
Status indicator LED: POWER, LOGGING, SD CARD, SEND, COM, ERROR
RUN contact output*1: Photo MOSFET relay (no polarity); (OFF in error detected)
*1. Run contact output is applicable for Type C with the DL8 firmware version 1.4.x or later.

ETHERNET COMMUNICATION

Communication Standard: IEEE 802.3u
Transmission: 10BASE-T, 100BASE-TX
Baud rate: 10/100 Mbps (Auto Negotiation function)
Protocol: TCP/IP, Modbus/TCP, SLMP, HTTP, HTTPS, FTP, FTPS, SMTP, SNTP
Transmission media: 10BASE-T (STP, Category 5), 100BASE-TX (STP, Category 5e)
Max. length of fieldbus segment: 100 meters
Ethernet indicator LED: DPLX, LNK
IP address: 192.168.0.1 (factory setting)

INSTALLATION

Power input: 24 V DC
Power consumption: Approx. 12 W 24 V DC
@ internal power max. current 1.6 A
Internal power supply (power supply for I/O module): 5 V DC, 1.6 A
Excitation supply output (excitation for I/O module): 24 V DC $\pm 10\%$, operational current 7 A
(From power supply (excitation supply) connector, via connector for internal bus, supplied to each I/O module. Power output current consumption must be under operational current.)
Operating temperature: -10 to +55°C (14 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Atmosphere: No corrosive gas or heavy dust
Mounting: DIN rail
Weight: 190 g (0.42 lb)

PERFORMANCE

Battery: Vanadium-lithium secondary battery (und detachable)
Calendar clock accuracy: Monthly deviation 2 minutes at 25°C
Battery backup: Approx. 2 months
Insulation resistance: ≥ 100 M Ω with 500 V DC
Dielectric strength: 1500 V AC @ 1 minute (Ethernet to internal bus or internal power or power supply (exc. supply) to RUN contact output to FE)

COMPATIBLE BROWSING DEVICE

■ **Software requirement**
Functional checked environment
● **PC**
• **OS:** Windows 8.1 (32-bit/64-bit), Windows 10 (32-bit/64-bit)
• **Browser:** Internet Explorer 11, Microsoft Edge 96.0, Chrome 97.0, Firefox 95.0
● **Tablet**
• **OS:** iPad (iOS 15.2); Android terminal (Android 10.0)
• **Browser:** iOS: Safari; Android: Chrome
● **Smart phone**
• **OS:** iPhone (iOS 15.2); Android terminal (Android 10.0)
• **Browser:** (iOS) Safari; (Android) Chrome

COMMUNICATION

IP: DHCP client is supported. Manual setting of IP address, subnet mask, default gateway and DNS server available too.
Modbus/TCP slave: Remote observation system via SCADA etc. Number of connections 4
Modbus/TCP master: I/O expansion with remote I/O, e.g. R3 or R7 series, is available. Measuring points in multiple locations can be handled collectively.
SLMP Client: DL8 allows I/O expansion by connecting with the SLMP-compatible CPU unit of Mitsubishi programmable-controller MELSEC; and collectively handles data from measuring points in multiple locations.
Web server function (Direct): This unit can be a Web server, and 'Data,' 'Trend' and 'Event Log' views are available from remote location.
Web server function (Cloud): This unit can be an FTP client, and upload the Web files to a cloud server. Users can browse the cloud server. Multiple users can access it at once without extra load at the unit. (only browsing, operation not available.)
Analog input: 32 points
Discrete input: 64 points
Pulse input: 32 points
Discrete output: 64 points
Analog output: 32 points (firmware version of the unit: 1.4.x or later)
(For pulse input, only 32 bit data is available. It is not available for the products using 16 bit data (model: R3-PA16 etc.).

ALARM OUTPUT (Type B, C, D, E)

Event can trigger an alarm contact at a discrete output module.
• Transition of analog input zone
• Transition of pulse input zone
• Status change of discrete input
• Count up of discrete input

EVENT REPORTING (Type B, C, D, E)

Reporting email function available at event or designated time.
Encrypted communication is supported. (SMTP over SSL).
The DL8 turns a designated Do ON after transmitting the report.
• Number of email attention: 32
• Number of event report text: 32
• Number of regular report text: 1
• Channel status: AI, DI, PI, DO, AO status attachable to email (DO and AO are available with firmware version of the unit 1.4.x or later)
• Output at transmitting failure: 1 point

LOGGING (Type C, D, E)

Log files in text format are stored into an SD card. The number of logs depends on the free space of the SD card.
• Log file: System log, event log, email report log, channel log

FTP CLIENT (Type B, C, D, E)

The recorded data is uploaded to an FTP server and FTPS server (Type E) in CSV format in specified interval time.
User can define the CSV file.
• Number of channel: Max. 32 (Selectable within AI, DI, DI (counter), PI, DO, AO)
(AO is selectable with firmware version of the unit 1.4.x or later)
• Sampling rate (Firmware version 1.6.x or later) 1 or 2 sec (Interval time: 1 or 10 min. or 1 hr.) 5, 10 or 30 sec. (Interval time: 10 min. or 1 hr.) 1, 2, 5, 10, 15, 20 or 30 min. (Interval time: 1 day)
• Sampling rate (Firmware version 1.2.x or later) 1 or 2 sec (Interval time: 1 or 10 min. or 1 hr.) 5, 10 or 30 sec. (Interval time: 10 min. or 1 hr.) 1, 2, 5, 10 or 30 min. (Interval time: 1 day)
• Sampling rate (Firmware version 1.1.x or earlier) 1, 2, 5, 10 or 30 sec. (Interval time: 1 hr.) 1, 2, 5, 10 or 30 min. (Interval time: 1 day)
To confirm the firmware version, use the configurator software, model: DLCFG. Event can trigger an alarm contact at a discrete output module.

TREND DATA STORING (Type C, D, E)

The logged data is written into the SD card in CSV format.
User can define the CSV file.
• Number of channels: Max. 32 (Selectable within AI, DI, DI (counter), PI, DO, AO)
(DO and AO are selectable with firmware version of the unit 1.4.x or later)
• AI sampling: Momentary, average, peak (max.), peak (min.)
• Logging rate: Second: 1, 2, 5, 10, 20, 30 sec. Minute: 1, 2, 5, 10, 15, 20, 30 min. (15 min. is selectable with firmware version 1.5.x or later) On the hour: 0 to 23 o'clock (1 or more times available; specify time delay for each set time) Day start time and days to log are available.
• Recordable up to the SD card size. Automatically deleted. (Auto delete is available with firmware version of the unit 1.4.x or later)
• Recording period (as a guide): Approx. 180 days (logging rate: 1 sec, 32 channels, only trend storing)

FTP SERVER (Type C, D, E)

Reading and deleting files in the SD card by an FTP client and an FTPS client (Type E) are available.
Compatible FTP client
• Explorer
• FFFTP 4.4
Compatible FTPS client
• FFFTP 5.6

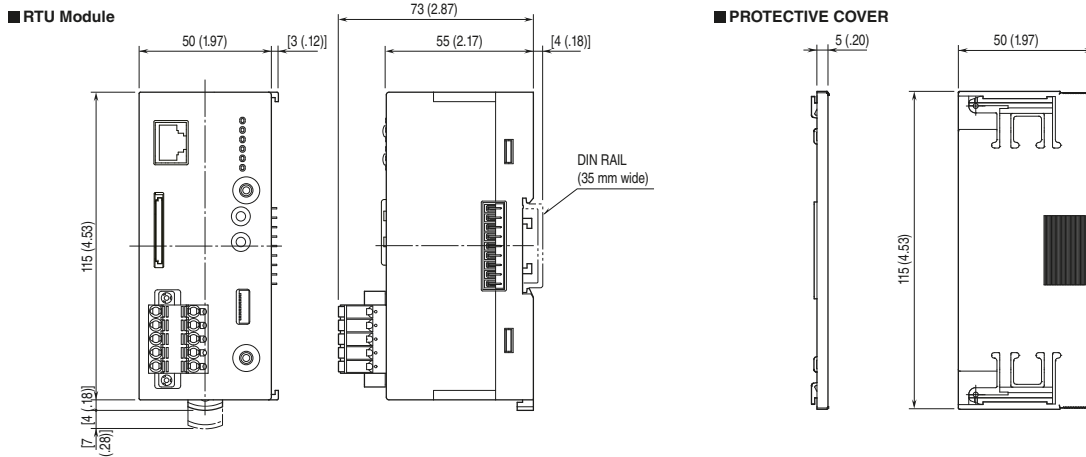
I/O MAPPING (Type D, E)

Multiplex Data Transmission for remote I/O and IP telemeter is available by registering DI-to-DO or AI-to-AO mapping information.

USER DEFINED BROWSER VIEW (Type D, E)

The browser view is user-definable. Development tools for HTML file are not available by us. Provide by customer.

EXTERNAL DIMENSIONS unit: mm (inch)

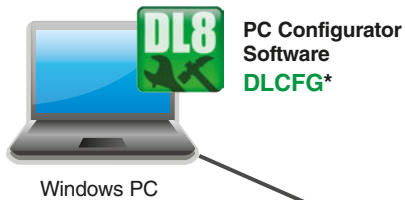


How To Setup the DL8

Setup System Configuration

Remote Setting

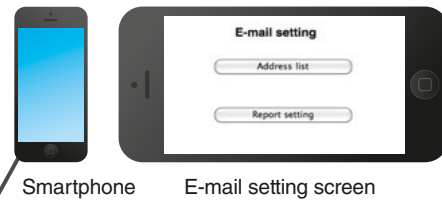
For the DL8 connected to the Internet, settings can be downloaded to change from a PC where the PC Configurator Software (model: DLCFG) is installed (excluding basic setting items such as the communication parameters).



*Free downloading from our website.

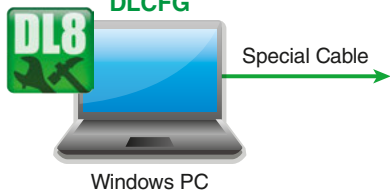
Remote Mail Setting

Email recipients and message templates can be added or changed by accessing the “E-mail setting” screen from the browser of smartphone or PC.



Local Setting

PC Configurator Software
DLCFG



Complete setup is available by connecting the DL8 via Special Cable (model: COP-US, to be separately purchased) to a PC where the PC Configurator Software (model: DLCFG) is installed.



Special Cable
PC Configurator Cable
Model: **COP-US**



Website



Request Info

MG CO., LTD.
(formerly M-System Co., Ltd.)
www.mgco.jp

Your local representative:

Blank area for local representative information.