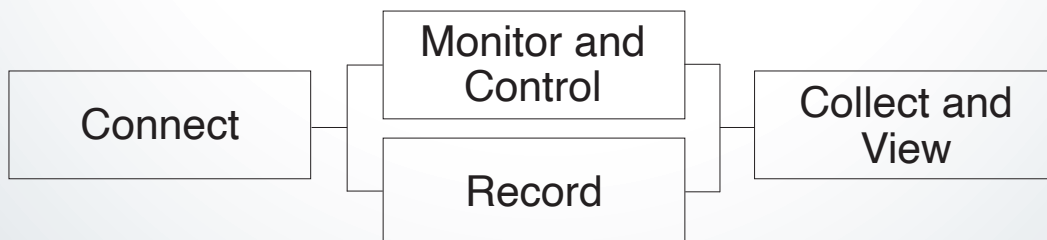


Linking Together a Diverse Array of Instruments



*The name GENNECT was coined from the Japanese word for "field" (genba) and the English word connect.



**Special
WEB site**

Scan this QR Code for more information about GENNECT One.

Extensive Support for Tasks Ranging from Monitoring to Reporting

Introducing a programming-less solution
 GENNECT One links together a diverse array of instruments so you can solve problems in the field.

Daily monitoring

Monitor measured values from the field in real time.

Remote control

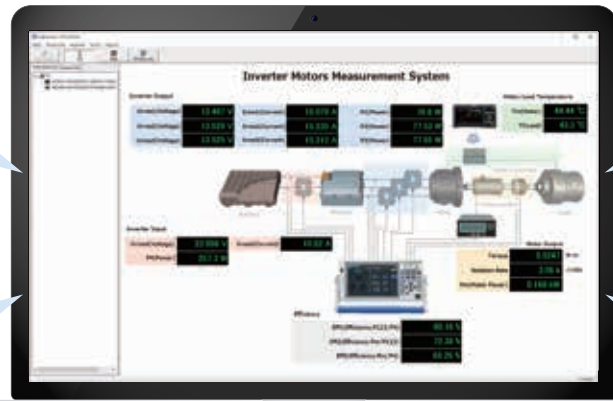
Change settings remotely, without the need to visit the measurement field.

Anomaly detection

React quickly to anomalies occurring in the field.

Daily report creation

Easily compile regular reports.



HUB



Connect each measuring instrument with LAN cable



Power Analysis

- PW3390
- PW6001
- PW8001
- PW3335
- PW3336
- PW3337

Monitoring Power Quality

- PQ3100
- PQ3198

Understanding Power Consumption

- PW3360
- PW3365

Voltage and temperature management

- LR8450,50-01
- LR8410
- LR8400 series

Waveform Analysis

- MR6000

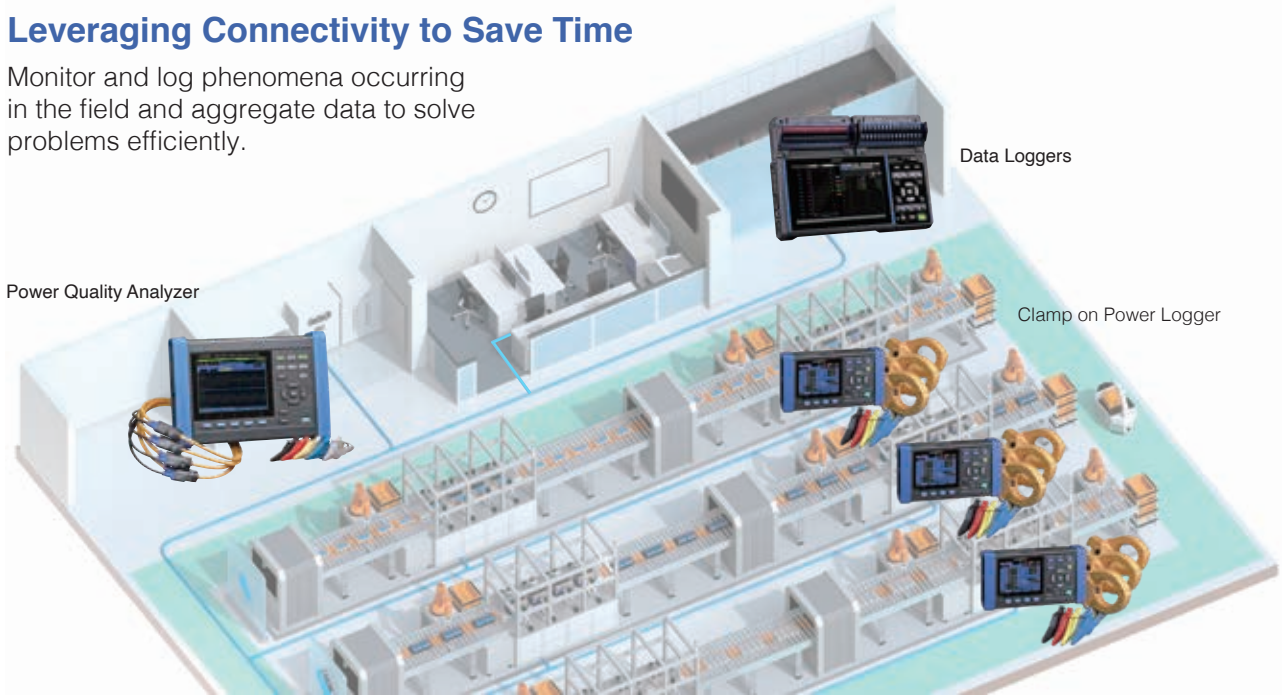
UPS Inspection

- BT3554
- BT3554-50



Leveraging Connectivity to Save Time

Monitor and log phenomena occurring in the field and aggregate data to solve problems efficiently.



Task	Functions and capabilities
Daily monitoring, anomaly detection	Display measured values from multiple, PC-connected instruments on an intuitive and illustrative dashboard by freely placing the measurement values and other elements anywhere on your own photos or diagrams. Set threshold ranges to set alarms and check their states on the display. Leverage this information to respond more quickly to problems in the field.
Remote control	Use remote control functionality to change the settings of multiple LAN-connected instruments from a PC without the need to visit the fields. Synchronize instruments' clocks to a PC's clock regularly and automatically without using dedicated triggers.
Collection and summarization of data from multiple instruments; daily report creation	Aggregate logging data from multiple instruments and display it using graphs. Boost work efficiency by easily tabulating measurement data on a daily basis and automatically generating daily reports or CSV files.
Central management of measurement data	Automatically transfer measurement files saved on instruments to a PC, acquire files manually , or review data as a time series using the time-series viewer . Launch dedicated software if you need to analyze measurement data in more detail.

Compatible instruments

	Logging	Dashboard	File Acquisition (Manual)*1	File Transfer (automatic)	Remote control	Configure instrument settings	Automatic time synchronization *4	Time series viewer
	LAN							
Power Quality Analyzer								
PQ3100	✓	✓	✓	✓	✓	✓*5	✓	-
PQ3198	✓	✓	✓	✓	✓	✓*5	✓	-
Clamp on Power Logger								
PW3360, PW3365	✓	✓	✓	✓	✓	✓*5	✓	✓
Power Analyzer								
PW3390	✓	✓	✓	-	✓	✓*5	✓	-
PW6001	✓	✓	✓	-	✓	✓*5	✓	-
PW8001	✓	✓	✓	✓	✓	✓*5	✓	✓
Power Meters								
PW3335, PW3336, PW3337	✓	✓	-	-	✓	✓*5	-	-
Data Loggers								
LR8450, LR8450-01	✓	✓	✓	✓	✓	✓*5	✓	✓
LR8410, LR8416	✓	✓	✓	✓	✓*2	✓*5	✓	✓
LR5001, LR5011, LR5021, LR5031, LR5014, LR5042, LR5043, LR5051, LR5061	-	-	-	-	-	-	-	✓*3
Memory HiCorder								
MR6000	✓	✓	✓	✓	✓	✓*5	✓	-
Battery Tester								
BT3554-50	-	-	✓ (Via USB)	-	-	✓	-	-

*1 The type of storage supported varies with the instrument.

*2 GENNECT One only supports Internet Explorer 11 with Java installed (because it uses a Java applet).

*3 GENNECT One can import measurement files acquired by the PC application software "LR5000 Utility".

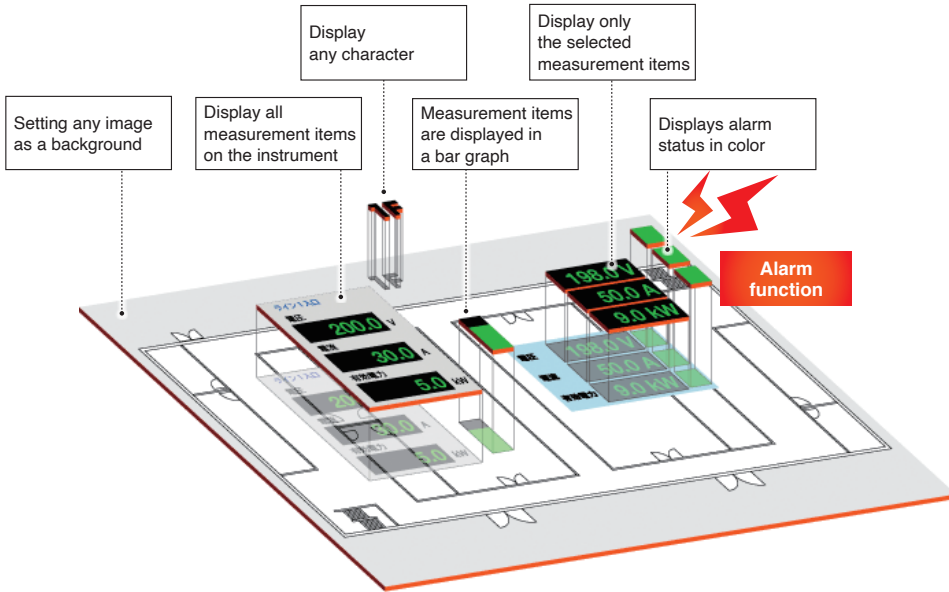
*4 When setting the clock of measuring instruments, the measurement or the integration may pause. *5 Available to set by remote control function.

Monitoring and Controlling

In manufacturing...

Dashboard

Create a dashboard by freely placing components like measured values, alarms, and graphs onto your original background image. Measured values can be logged while displaying them on the dashboard in real time.



Issue

You want to react quickly to anomalies at the field.

Solution: Anomaly Detection

Generate alarms whenever measured values exceed the user's own threshold values and review them on a PC in the office.

Layout parts change to alarm color when the set threshold range is exceeded.
The date, time and content of the alarm are automatically saved.
Thresholds: upper limit, lower limit, upper and lower limit

Avoid rushing out to the fields



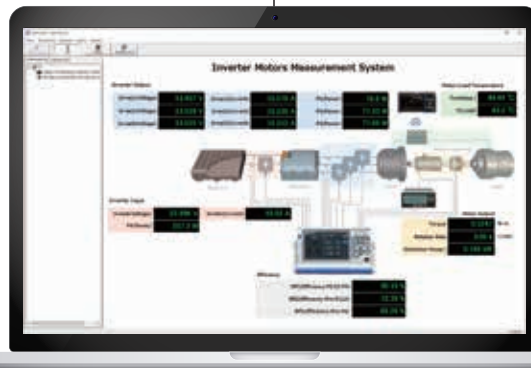
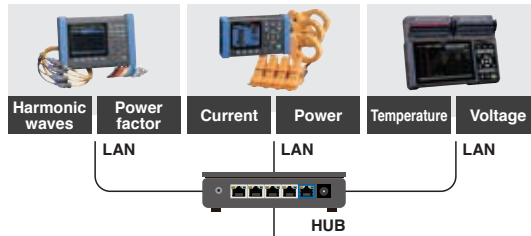
Issue

You want to change settings remotely, without the need to visit the measurement field.

Solution: Remote Control

Change instrument settings without visiting the measurement field.

Number of instruments able to connect: 30 units



Time discrepancies

19:32 19:29 19:41



Issue

You want to compare data after synchronizing instruments' clocks.

Solution: Clock Synchronization

Synchronize instruments' clocks to a PC's clock regularly and automatically.

Shared dashboard and logging features

Logging intervals	1, 2, 5, 10, 30 sec., 1, 2, 5, 10, 30 min., 1 hour
Monitor intervals (on the dashboard)	(Available interval settings depend on the LAN communications environment.)
Data division	1 day or 1 hour
Data output	Automatic daily • weekly* • monthly* report output (Excel®), Automatic CSV output
Interface	LAN

*Coming soon

Recording

In research and testing...

Logging

Capture measurement data from multiple instruments at a fixed interval once logging starts. Display and save downloaded data in real time on a PC and use it to automatically generate daily reports.

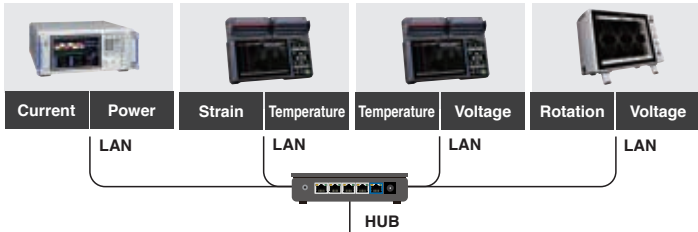


Issue	Solution: Inter-channel Calculations
You're aggregating calculation results using saved measurement data, but you're spending too much time on daily processing.	Perform calculations using previously defined equations, and display and save the results. Up to 16 calculations can be performed simultaneously.

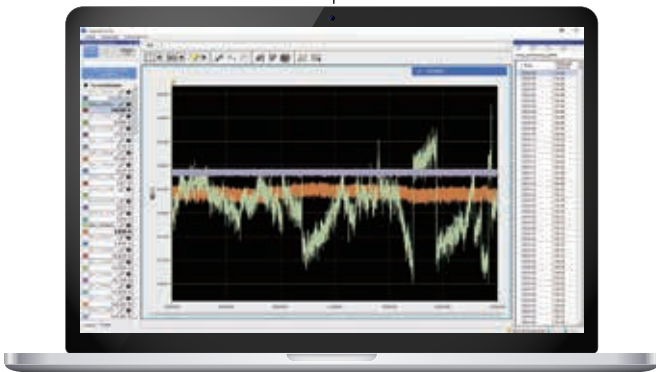
Numerical value	Channels or constants
Basic arithmetic operations	+, -, x, ÷, brackets
Basic operation	Absolute value, square root, cube root, power
Trigonometric function	sin, cos, tan, arcsin, arccos, arctan
Exponential functions, logarithmic functions	exp, log10, ln
Rounding	Round up, down, or round to the specified number of digits



Number of instruments able to connect: 30 units



Issue	Solution: Automatic Reports
You're having difficulty compiling daily reports that tabulate measurement data from multiple instruments because you're performing measurement continuously over an extended period of time. You want to automate that process.	Automatically generate one file per day, week or month based on values that have been tabulated over a specified interval. Automatically generate CSV files.



Example of an automatically generated daily report

Shared dashboard and logging features

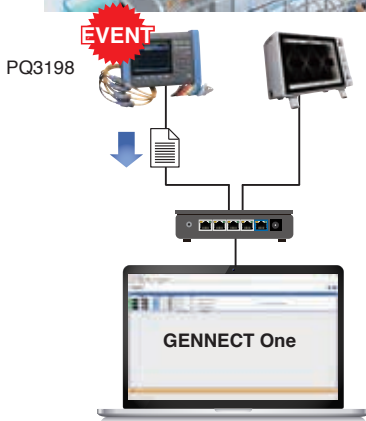
Measurement parameters	
PW8001, PW6001, PW3390	Basic Measurement items, Harmonic measurement items (Instantaneous value per interval)
PW3335, PW3336, PW3337	Basic Measurement items (Instantaneous value per interval)
PQ3100, PQ3198, PW3365, PW3360	Voltage, Current, Power (Instantaneous value per interval)(MAX, MIN, AVE values between intervals)
LR8450, LR8450-01, LR8410, LR8416, MR6000	Various measurement items such as Temperature, Analog input, etc. (Instantaneous value per interval)
Number of items able to monitor and log	Max. 512 items + Inter-channel calculation value 16 items

Collection and Viewing

Issue
 You're expending a significant amount of effort and management man-hours every time you collect measurement data after an event.

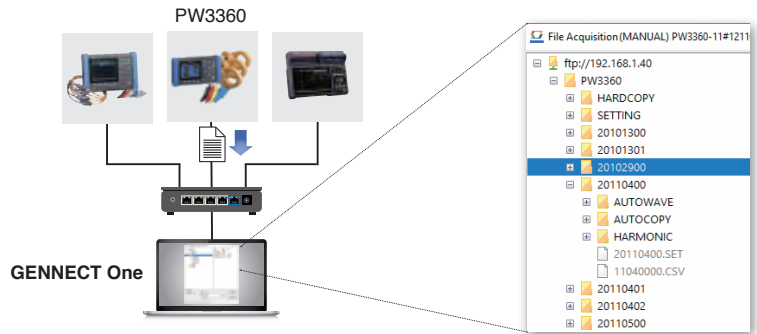
Solution: You can import measurement data to a PC from the field-installed measuring instruments. The existing data in the PC can also be viewed on the GENNECT One software.

File Transfer (Automatic)
 When a measurement file is saved by a measurement device connected via LAN, it is automatically transferred to the PC.



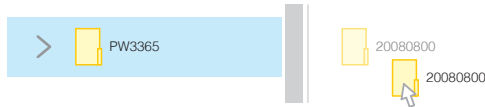
Example: The PQ3198 is installed in the field to monitor power supply abnormalities. When an event occurs, the saved data file is automatically transferred to the PC.

File Acquisition (Manual)
 Measurement files stored in measurement devices connected via LAN can be directly accessed and acquired from a PC.



Example: On a PC, select the PW3360 from the list of LAN connected devices and download the desired measurement files.

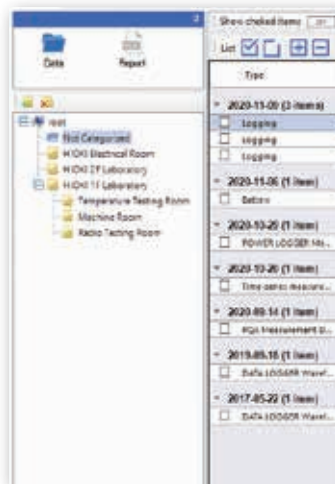
Using Existing Data (Manual)
 If you have a dedicated measurement file saved on your PC, you can simply drag and drop the dedicated file to the Gennect One app to read it.



Compatible instruments: LR8400 series, LR8410, LR8416, LR8450, LR8450-01, LR5000 series, MR6000, PW3360, PW3365, PQ3100, PQ3198 (Coming soon: PW3390, PW6001, PW8001)

Centralized management of measurement files

Data List
 Combine the measurement files acquired with GENNECT One into a single data list. You can manage measurement data by measurement site or by measurement time.

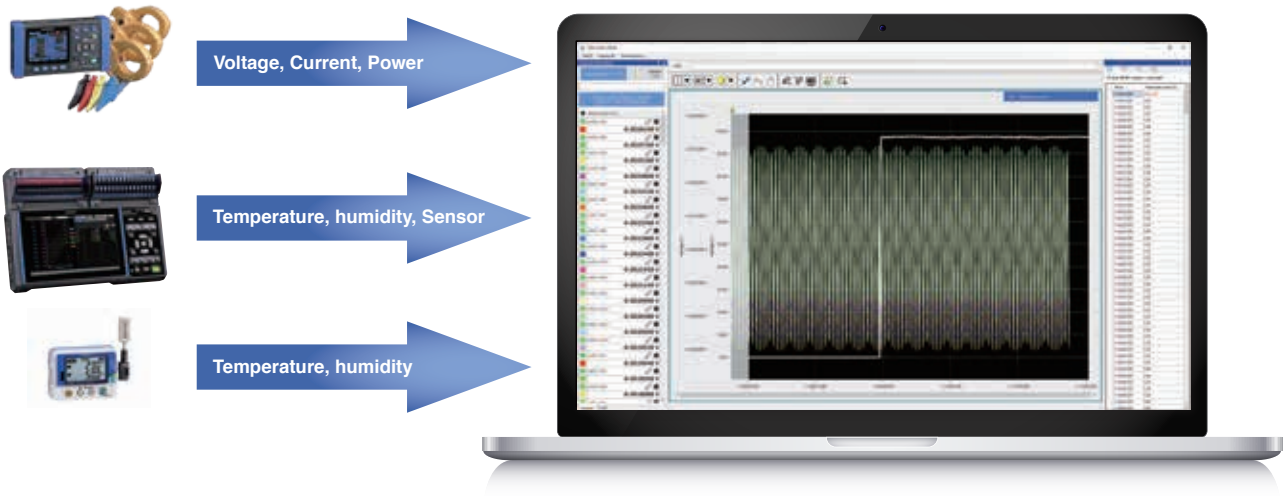


Display the measurement files in a list. Manage the measurement files easily.

- Title name
- Folder classification
- Input comments
- Search tag

Time-series Viewer

Display data measured using different instruments on a single time-series graph.



Supported data	LR8400 series, LR8410, LR8416, LR8450, LR8450-01 waveform data PW8001 measurement data, waveform data PW3360, PW3365 measurement data LR5000 series measurement data
Analysis function	<ul style="list-style-type: none"> • Statistical analysis (AVE, P-P, MAX, MIN, ON, OFF, Standard deviation, Accumulate, Area Value, Integral) • Waveform Search (Time, MAX, MIN, Local maximum, Local minimum, Level, Window, Amount of change) • Search for Event Marks • Editing and CSV output (Overall, between A and B cursors) • Image output
Number of display items	Max. 512 items (graphs is Max. 32 items)

Instrument-specific Software (Options)

Clicking on a measurement file launches the browsing software and displays the file.

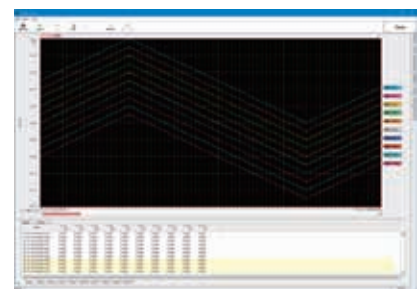
*You need to install the software beforehand



PQ ONE



POWER LOGGER VIEWER SF1001



Logger utility

Listed measurement files	Measurement files obtained by the file transfer (automatic) of GENNECT One Measurement files obtained by the file acquisition (manual) of GENNECT One Importing GENNECT Cross measurement files. (hok format) *1 Importing GENNECT Remote measurement files. (hok format) Importing measurement data from Internal memory, Recording media or External Storage via LAN connection Importing measurement data from internal memory via USB connection Image data (jpg, bmp, png, and gif formats) and pdf data Measuring instruments supporting measurement data importing: LR8400 series, LR8410, LR8416, LR8450, LR8450-01, LR5000 series, MR6000, PW3360, PW3365, PQ3100, PQ3198, (Coming soon: PW3390, PW6001, PW8001)
Viewing Software	PQ ONE *2: PQ3100, PQ3198 POWER LOGGER VIEWER SF1001 *3: PW3360, PW3365 Logger utility *2: LR8400, LR8410, LR8450, LR8450-01 Waveform Viewer (Wv) *2 or WAVE PROCESSOR 9335 *3: MR8875, MR6000 MR6000 Viewer *2: MR6000 Graph viewer for real-time measurement of GENNECT One *2 PW Assistant of GENNECT One *2

*1: Battery, General measurement, Logging only *2: Free software. *3: Paid software.

Operating environment

Supported OS	Windows 7 (32bit/64bit), Windows 8.1 (32bit/64bit), Windows 10 (32bit/64bit), Windows 11
Software environment	Microsoft .NET Framework 4.6.2 or later
CPU	2 GHz or more operating clock
Memory	4 GB or more
Display	Resolution 1366 x 768 or more
Hard disk	Free space of 1 GB or more

Specification

Monitor display*1 and automatic output (daily report • weekly report*2 • Monthly report*2, CSV) of measured values in real time from measuring instruments connected via LAN

Logging	
Interface	LAN
Function	Real-time*1 graph display, list display, and automatic output (daily report • weekly report*2 • Monthly report*2, CSV) of measured values from measuring instruments connected via LAN* *1: Acquire measured values (current values) displayed on instruments at a set interval (as short as 1 sec.) using the computer's timer. *2: Coming soon
Logging intervals	1, 2, 5, 10, 30 sec., 1, 2, 5, 10, 30 min., 1 hour
Measurement parameters	<ul style="list-style-type: none"> • PW8001, PW6001, PW3390: Basic Measurement items, Harmonic measurement items (Instantaneous value per interval) • PW3335, PW3336, PW3337: Basic Measurement items (Instantaneous value per interval) • PQ3100, PQ3198, PW3365, PW3360: Voltage, Current, Power (Instantaneous value per interval, MAX, MIN, AVE values between intervals) • LR8400, LR8401, LR8402, LR8410, LR8450, LR8450-01, MR6000: Various measurement items such as Temperature, Analog input, etc. (Instantaneous value per interval) • Inter-channel calculation value
Number of items able to monitor and log	Max. 512 items + Inter-channel calculation value 16 items *Max. 32 items when simultaneously displaying graphs
Recording time	Continuing time: Continuous measurement/Set time, file segmentation: 1 day / 1 hour * Stop logging when the storage capacity of the PC drops below 512MB
Number of instruments able to connect	30 units
Dashboard	
Interface	LAN
Function	<ul style="list-style-type: none"> • Real-time*1 monitor display and automatic output (daily report • weekly report*2 • Monthly report*2, CSV) of measured values from measuring instruments connected via LAN* • Display alarms in real time when a measured value exceeds a threshold.*1 • Display measured values on a user-selected image. *1: Acquire measured values (current values) displayed on instruments at a set interval (as short as 1 sec.) according to the computer's timer. *2: Coming soon
Monitor interval	1, 2, 5, 10, 30 sec., 1, 2, 5, 10, 30 min., 1 hour
Measurement parameters	<ul style="list-style-type: none"> • PW8001, PW6001, PW3390: Basic Measurement items, Harmonic measurement items (Instantaneous value per interval) • PW3335, PW3336, PW3337: Basic Measurement items (Instantaneous value per interval) • PQ3100, PQ3198, PW3365, PW3360: Voltage, Current, Power (Instantaneous value per interval, MAX, MIN, AVE values between intervals) • LR8400, LR8401, LR8402, LR8410, LR8450, LR8450-01, MR6000: Various measurement items such as Temperature, Analog input, etc. (Instantaneous value per interval) • Inter-channel calculation value
Number of items able to monitor and log	Max. 512 items + Inter-channel calculation value 16 items
Recording time	Continuing time: Continuous measurement, file segmentation: 1 day / 1 hour * Stop logging when the storage capacity of the PC drops below 512MB
Number of instruments able to connect	30 units
Remote control	
Interface	LAN
Function	Control LAN-connected instruments from a computer.
Compatible instruments	PQ3100, PQ3198, PW3360, PW3365, PW3390, PW6001, PW8001, PW3335, PW3336, PW3337 LR8400, LR8401, LR8402, LR8410, LR8450, LR8450-01, MR6000
Number of simultaneous operation	30 unit
Automatic file transfer	
Interface	LAN
Function	Automatically send files saved by LAN-connected instruments to a computer.
Compatible instruments	PQ3100, PQ3198, PW3360, PW3365, PW8001 LR8400, LR8401, LR8402, LR8410, LR8450, LR8450-01, MR6000
Number of instruments able to connect	15 units
File Acquisition (manual)	
Interface	LAN, USB (USB is BT3554, 3554 only)
Function	Acquire files saved by LAN-connected instruments with a computer.
Compatible instruments	PQ3100, PQ3198, PW3360, PW3365, PW3390, PW6001, PW8001 LR8400, LR8401, LR8402, LR8410, LR8450, LR8450-01, MR6000, BT3554-50, BT3554, 3554
Number of simultaneous operation	1 unit at a time
Time-series viewer	
Supported data	LR8400 series, LR8410, LR8450, LR8450-01, LR5000 series, PW8001, PW3360, PW3365
Number of display items	Max. 512 items (graphs is Max. 32 items)
Other Functions	
Files loading	Data file (.hok) obtained by GENNECT Cross for iOS/Android *Logging, General Measurement, image and battery formats only *No direct Bluetooth® connection is possible, please use the smartphone app for Bluetooth® data collection
Instrument clock synchronization	PQ3100, PQ3198, PW3360, PW3365, PW3390, PW6001, PW8001 LR8400, LR8401, LR8402, LR8410, LR8450, LR8450-01, MR6000, BT3554-50, BT3554, 3554
CSV output	Logging data, time-series measurement data, waveform files from instruments that support the time-series viewer, data files acquired with GENNECT Cross (standard measurement, battery)
Report creation	PDF, Word and Excel® formats

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