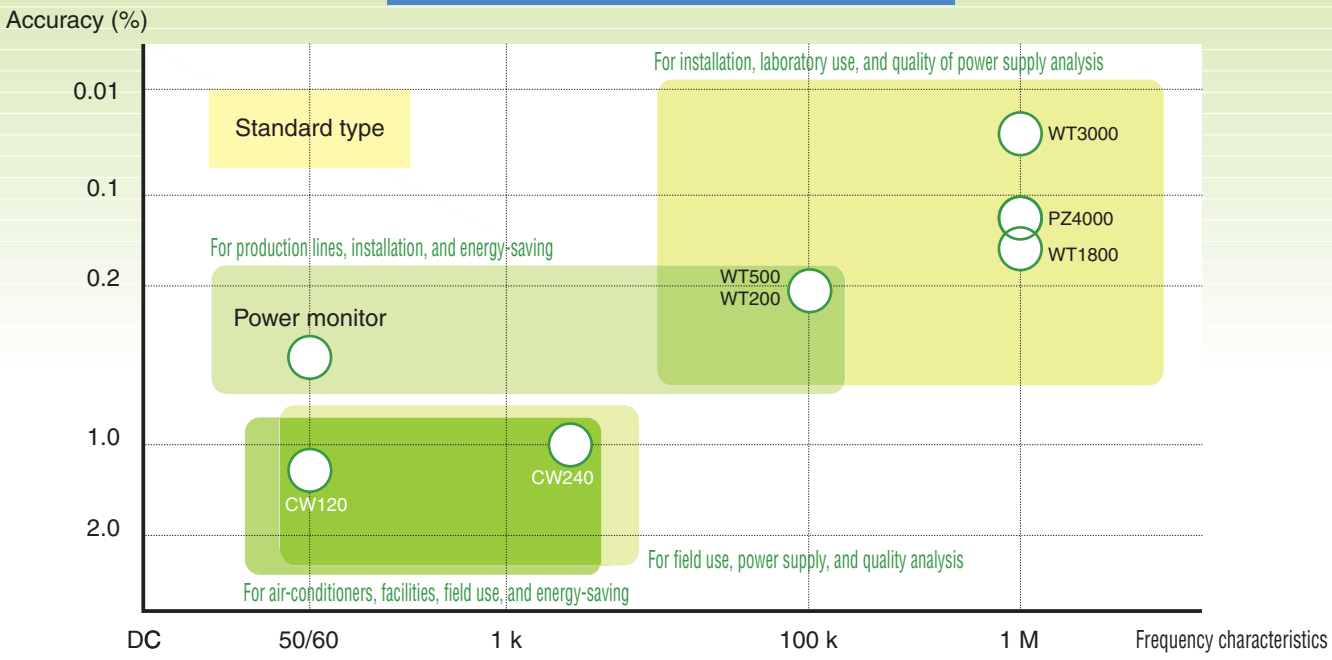
YOKOGAWA

Yokogawa Group's Power Measuring Instruments

We offer a wide range of solutions for maintenance, production, design, and R&D.

Classification of Power Measuring Instruments



Choose an appropriate model for your needs.

Clamp-on Power Meter
CW240

Power measurement and power supply quality control in a single unit

Clamp-on Power Meter
CW120

Support and analysis for energy-saving

Portable Data Logger
Datum-Y™ XL120

Web monitoring of energy efficiency analysis and environmental measurement in buildings and facilities

Precision Power Analyzer
WT3000

World-class power accuracy of ±0.06%; for calibration or high-precision efficiency measurement of motors and inverters

High Performance Power Analyzer
WT1800
NEW

Up to six inputs, wide range of current input, and Dual harmonic measurement

Power Analyzer
WT500

Compact Design and Easy to Operate

Digital Power Meters
WT210
WT230

Power meters with superior cost performance

Yokogawa's Power Measuring Instruments with Excellent Technology and Reliability Offer a Wide Variety of Solutions for Each Customer's Needs.

ECO. PRODUCTS

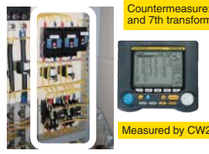
Harmonics measurement

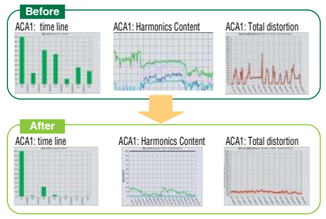
For evaluating the energy efficiency, harmonics, and power supply quality in plants and buildings

CW240

Case Example at Special Paper Printing Factory

● Problem: Periodically the printing machine is having trouble
Use CW240's harmonics measurement function and found out harmonics on power supply line.
Harmonics was generated by internal load.





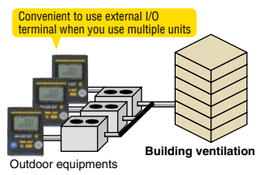
Result: Sharp decrease of relative harmonic content after 5thorder.Distortion rate is less than 30% maximum

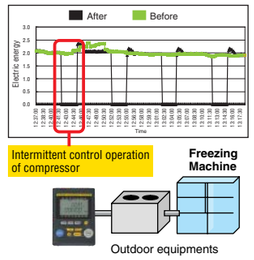
Energy Saving for Air-conditioing & Freezing machine

For evaluating the energy efficiency of air-conditioners and facilities in plants and buildings

CW120

Introduction Example: Measure electric energy of Air-conditioning and compressor of Freezing machine to check energy-saving effect
Point: Min data saving interval is 1 second
Can be measure electric energy for rise characteristics & Intermittent control operation





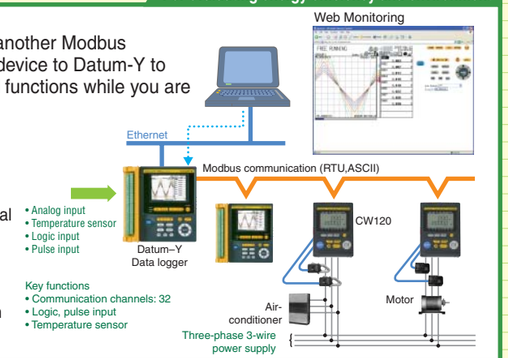
For evaluating energy efficiency and environment

Evaluation of the energy efficiency and environment in plants and buildings

Datum-Y XL120

You can connect another Modbus protocol enabled device to Datum-Y to use all of the LAN functions while you are acquiring data.

* For the LAN/RS-232 or LAN/RS-485 communication protocol, the measurement interval is more than 10 seconds, and the Modbus communication interval is more than 5 seconds.



Daily control of electric equipment

Leakage Clamp-on Tester

Leakage current measurement

- Accurate fundamentals measurements
- Resolution: 0.001 mA
- ACA 3/30 mA, 30/60 A range
- ϕ40
- Harmonic filter provided

30032A

Clamp-on Tester

Clamp-on Tester CL series

Digital Multimeter

3-year warranty high accuracy tester

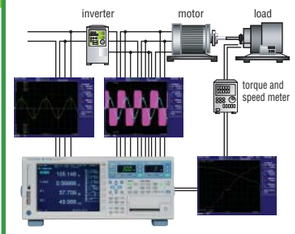
- 50,000 count display
- 0.02%rdg + 2 dgt maximum measurement accuracy
- Min/Max/Mean Value Display
- Built-in memory function
- 1000 V CATIII/600 V CATIV

TY720

Measurement of Inverter Efficiency

High-end Power Analyzer with Best-in-Class Precision

WT3000



● Simultaneous Measurement of Input and Output
The WT3000 offers up to four input elements capable of simultaneous measurement of single-phase input/three-phase output, or three-phase input/three-phase output.

● Accurate Measurement of Fundamental PWM Voltage
Accurate measurements of commonly measured values such as active power and the fundamental or harmonic components can be taken simultaneously without changing measuring modes.

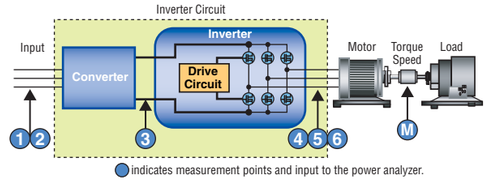
High-performance, Wide-range, and 6 Power Inputs

Power Measurement for Inverter / Motor Testing

NEW

WT1800

The WT1800 is capable of performing up to 6 power input measurements to make it possible to perform an inverter efficiency test between the input and output in inverter evaluation.
In addition, a motor evaluation function (option) makes it possible to simultaneously monitor voltage, current, and power changes, as well as rotation speed (A-, B-, and Z-phase) and torque changes.

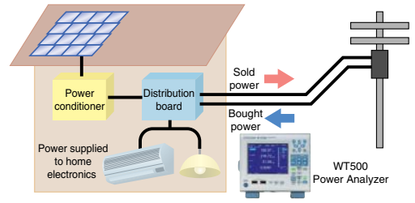


Measurement of power conditioned and bought for home electronics

Power Measurement for Renewable Energy

WT500

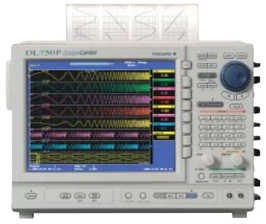
The WT500 measures power consumption of "sold power," which supplies photovoltaically generated power to interconnected systems, and "bought power" (purchases of electricity) and simultaneously displays data of bought/sold power, consumed/regenerated energy, and other data for energy-saving monitoring.



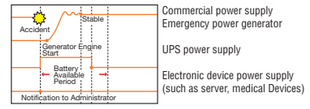
Operation Check of Emergency Power Generator

For recording waveforms over a long time

DL750P

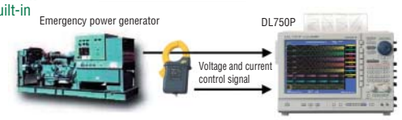


Private power generators consist of battery-operated uninterruptible power supplies (UPS), boilers with turbines (cogeneration power plants), and diesel power generators.
All devices are controlled by switching the system from the power station power supply lines. Therefore it is important to carry out periodic maintenance of the switching system to ensure smooth operation.



Points

- Multi-channel simultaneous measurement
- 210 mm width A4 thermal printer built-in
- Power frequency measurement
- Abnormal waveform trigger (wave window trigger)
- Network support (Web server, e-mail notification)



Accessories for Power Meters

Current clamp-on probe for CW series

Optional data analysis software package AP240E for CW series

●Accessories (Current Clamp-on Probe)

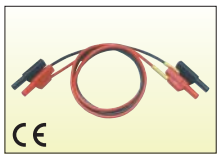
Model	96036	96033	96030	96031	96032	96034	96035
Clamp-on Probes							 * Need AC adapter
Diameter of measurable conductor	ϕ 40 mm	ϕ 18 mm	ϕ 30 mm	ϕ 30 mm	ϕ 65 mm	65 × 100 mm	ϕ 170 mm
Measuring Range	AC 2 A	AC 50 A	AC 200 A	AC 500 A	AC 700 A (1000 A 5 min)	AC 1000/2000/3000 A	AC 300/3000 A
Output Voltage	AC 50 mV	AC 500 mV	AC 500 mV	AC 500 mV	AC 250 mV	AC 500 mV	AC 500 mV
Accuracy* Depends on input	±0.5% of rdg ±0.01 mV	±0.5% of rdg ±0.1 mV	±0.5% of rdg ±0.1 mV	±0.5% of rdg ±0.1 mV	±1.0% of rdg ±0.2 mV	±1.0% of rdg	±1.0% of rdg
Phase	Within ±2°	Within ±1.0°	Within ±0.5°	Within ±1.0°	Within ±1.0°	Within ±1.0°	Within ±1.0°
Frequency Range	20 Hz to 5 kHz	20 Hz to 20 kHz	20 Hz to 20 kHz	20 Hz to 5 kHz	45 Hz to 66 Hz	30 Hz to 1.5 kHz	10 Hz to 20 kHz
External dimensions	70 × 120 × 25 mm	52 × 106 × 25 mm	73 × 130 × 30 mm	73 × 130 × 30 mm	100 × 172.5 × 32 mm	120 × 310 × 48 mm	140 × 64 × 28 mm
Weight	Approx. 300 g	Approx. 220 g	Approx. 300 g	Approx. 300 g	Approx. 500 g	Approx. 1,390 g	Approx. 470 g

* The CW240 does not work without a current clamp-on probe (96030 to 96036).
The probe must be purchased separately.
*Need to purchase AC adapter separately

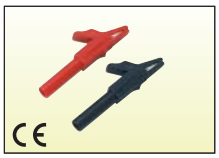
Accessories for WT series

●Adapters and Cables

758917
Measurement leads
Two leads in a set. Use 758917 in combination with 758922 or 758929.
Total length: 75 cm
Rating: 1000 V, 32 A

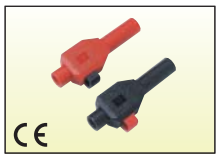


758922
Small alligator adapters
For connection to measurement leads (758917). Two in a set.
Rating: 300 V

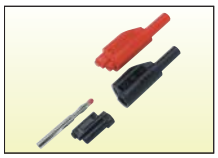


758929
Large alligator adapters
For connection to measurement leads (758917). Two in a set.
Rating: 1000 V

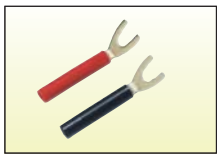
758923
Safety terminal adapter set
(spring-hold type) Two adapters in a set.



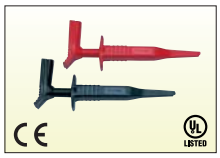
758931
Safety terminal adapter set
Screw-fastened adapters. Two adapters in a set. 1.5 mm Allen wrench included for tightening.



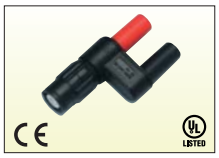
758921
Fork terminal adapter
Two adapters (red and black) to a set. Used when attaching banana plug to binding post.



701959
Safety mini-clip set (hook Type)
2 pieces (red and black) in one set. Rating 1000 V



758924
Conversion adapter
For conversion between male BNC and female banana plug



Due to the nature of this product, it is possible to touch its metal parts. Therefore, there is a risk of electric shock, so the product must be used with caution.

AC/DC Current Sensor CT series
CT60/CT200/CT1000
DC to 800 kHz/60 Apk
DC to 500 kHz/200 Apk
DC to 300 kHz/1000 Apk
Basic Accuracy: ±0.05% of reading + 30 µA
* Need ±15 Vdc Power Supply

Current Clamp on Probe
751552 AC1000Arms (1400Apeak)
- Measurement frequency range: 30 Hz to 5 kHz
- Basic accuracy: ±0.3% of reading
- Maximum allowed input: AC 1000 Arms, max 1400 Apk (AC)
- Current output type: 1 mA/A

Power and Energy Meter
PR300
- A Meter for Power Facility and a Monitor for Monitoring Energy Consumption
- Saves on cost, wiring, and space
  - Integrates a wide selection of functions for measuring things like energy (active, regenerative, reactive, and apparent), power (active, regenerative, reactive, and apparent), voltage, current, frequency, and power factor into a single unit.

Yokogawa Electric Corporation

YOKOGAWA
Yokogawa Meters & Instruments Corporation

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