NEW

Easy to Read Large Triple Display
Multifunction Power Meter for Power & Energy Management

YOKOGAWA ◆

LF 04L01L01-PRE

POWERCERT PR300 Debut!

- Large Triple Display
- RS485 as Standard Ethernet as Option
- Multifunction

PR300 P/W RANGE
READY ●
R A 780.3 MW
S B ... kW Hz A
T C
R A 8.67 MW
S B ... kW Hz
T C VA
R A 1236 MW
S B ... kW Hz
T C VAh

SET/ENT > ∨ ∧ SEL DEMAND

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Actual size (110mm-square for ANSI 4-inch round shape)

Integrated power monitoring by Daqstation

Data acquisition and monitoring using the recorder
The Ethernet-serial gateway function enables connection between the PR300 and RS-485 devices.

DX2000

Ethernet

RS-485/Modbus communication

PR300 (power)
(Ethernet-serial gateway)

Switch board

PR300 (power)

VJU7

(transformer temperature, etc.)

Transformer

UM331
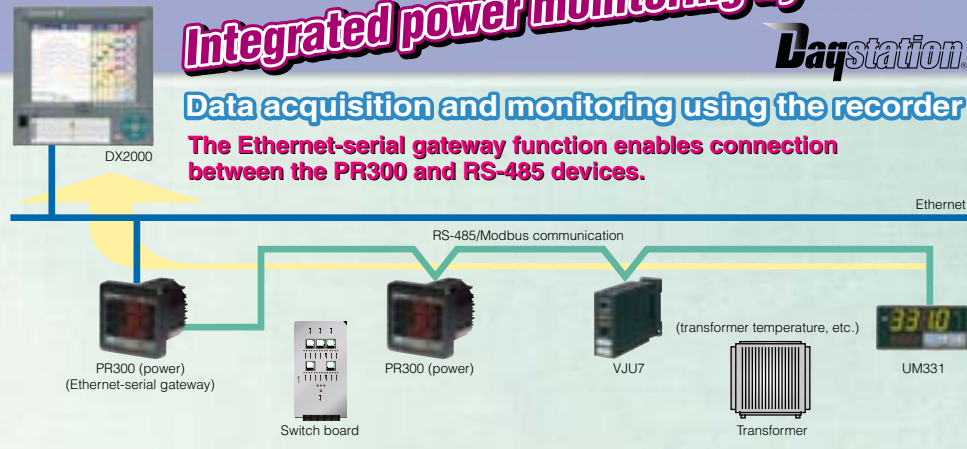
Universal Panel Cutout
DIN 96-square shape
ANSI 4-inch round form shape

Monitoring to Save Energy

Introducing a New Multifunction Power Meter for Power & Energy Management

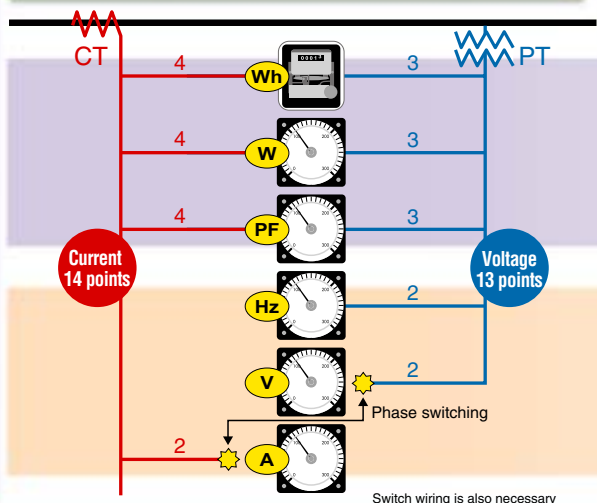### Various Meters Integrated in One PR300

Save on Cost   Save on Space   Save on Wiring

Before with analog meter (3p3w)
Ex) total **27** points wiring
(Current: 14 points)
(Voltage: 13 points)

CT 4 Wh 3 PT
4 W 3
4 PF 3
Current 14 points
Hz 2 Voltage 13 points
V 2
Phase switching
2 A
Switch wiring is also necessary

Now with PR300,
only **7** points wiring
(Current: 4 points)
(Voltage: 3 points)

Wh / W / PF : Energy / Power / Power Factor
Hz / V / A : Frequency / Voltage / Current

Current 4 points

Push!
One push, and change the display pattern!

Now, you can reduce complex wiring with PR300!
This example shows 1/4 reduction
PR300 can do it even if you need more measurement items.

PR300
READY ●
170.8 W
239.4 W
205.1 W

SEL DEMAND
YOKOGAWA ◆

- Simple wiring
- Voltage 3 points
- Frexible Display

The following measurement items can be selected for each display line

Measurement items
Active energy
Regenerative energy
LEAD Reactive energy
LAG Reactive energy
Apparent energy
Active power
Reactive power
Apparent power
Voltage (Phase switch indication)
Voltage-1
Voltage-2
Voltage-3
Current (Phase switch indication)
Current-1
Current-2
Current-3
Power factor
Frequency
Optional active energy
Demand value
Maximum demand value

NEW Demand measurement

Prevent penalty

Alarm is activated when demand value exceeds the preset alarm value

Contracted maximum demand value

KW
1500
750

0 6 12 18 24

About to exceed contracted power
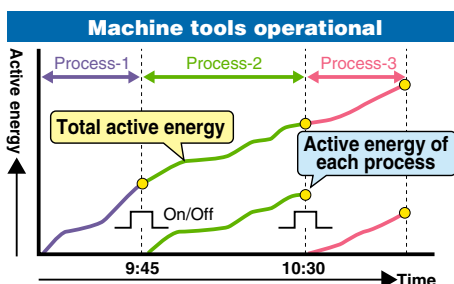
Alarm

VCT   VCT
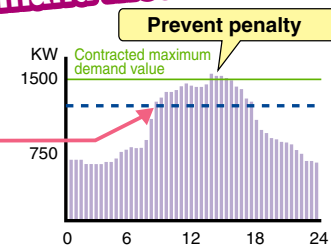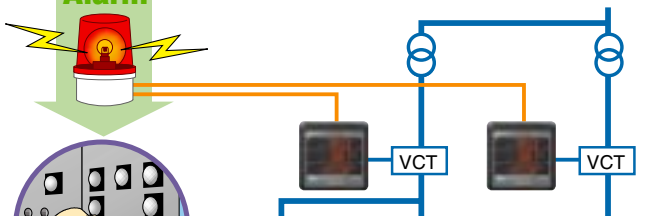
Operator controls the load

Arbitrary time integrated function

Active energy can be measured for the time period by external digital input

Active energy for each process can be measured

Check abnormality for each process

Process-2 is in operation

Machine tools operational

Active energy

Process-1 Process-2 Process-3

Total active energy

On/Off

Active energy of each process

9:45   10:30   → Time

Various measurement items

For generator manufacturers
Regenerative energy, too!

Measurement Item	Display	
Active energy	□□□□□ [kWh, MWh]	*1
Reactive energy	± □□□□□ [kvarh, Mvarh]	*2
Apparent energy	□□□□□ [kVAh, MVAh]	*1
Regenerative energy	− □□□□□ [kWh, MWh]	*2
Optional active energy	□□□□□ [Wh]	
Active/regenerative power (instantaneous, maximum, and minimum values)	□□□□ [W, kW, MW]	*2, *3
Reactive power (instantaneous, maximum, and minimum values)	□□□□ [var, kvar, Mvar]	*2, *3
Apparent power (instantaneous, maximum, and minimum values)	□□□□ [VA, kVA, MVA]	*1, *3
Voltage (instantaneous, maximum, and minimum values)	□□□□ [V, kV]	*1, *3
Current (instantaneous and maximum values)	□□□□ [A, kA]	*2, *4
Power factor (instantaneous, maximum, and minimum values)	LEAD: d □□□□ [COSφ] LAG: G □□□□ [COSφ]	*3
Frequency (instantaneous, maximum, and minimum values)	□□.□ [Hz]	*3
Demand power Maximum demand power	□□□□ [W, kW, MW] [DEMAND]	*4
Demand current Maximum demand current	□□□□ [A, kA] [DEMAND]	*4

*1:Without sign, but with a decimal point   *2:With a sign and a decimal point ("+" is not indicated). Regenerative power (energy) always shows "-" negative indication. The position of a decimal point differs depending on the primary rated power, VT ratio, and CT ratio. *3:"MAX" lights up for the maximum value and "MIN" lights up for the minimum value. *4:"MAX" lights up for the maximum value.