User's Manual

WT200 Digital Power Meter

Notice of Alterations

Please note the following alterations to the IM253421-01E.

Page viii "An example of an Operating Procedure"

Verify the setting by pressing the ENTER key.

(When entering a value and its operator (minus sign (–) for a negative value, and no sign for a positive value), a cursor blinks under the digit that can be modified using the arrow keys.)

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Page 3-6 "• When the measurement current is relatively small"

resistance of the current measurement circuit is approximately 100 m Ω . If the load resistance is 1 k Ω , for example, the effect on the measurement accuracy is approximately 0.01% (100 m Ω /1 k Ω).

Page 3-9 "Note"

Note_

• The figure in this section shows the PT and CT secondary side common terminal (+/- terminal) as being grounded for safety.

Page 4-13 "Explanation"

About the Averaging Function

This function performs exponential averaging or moving averaging on measurement values. When the displayed values are unsteady due to big fluctuations in power source or load, or due to the low frequency of the input signal, this function is useful to stabilize the displayed values for easier reading. The measurement items that are averaged directly are V (voltage), A (current), and W (active power). When using those measured V, A, and W values to calculate other measurement items, those items receive the effects of the averaging. Since certain values would lose their meaning if they were averaged (such as the peak (Vpk, lpk) values), averaging is not performed on them.

Page 5-4 "Note"

Note.

When the power factor is greater than 2.0000 or less than <u>-2.0000</u>: phase angle display is dEGEr.

Page 9-1 "Pin Assignment"

/DA4 specifications

remote control, 4 channel D/A output

Pin No.	Signal	Pin No.	Signal
1	DIGITAL COM	13	DIGITAL COM
2	EXT HOLD (Input)	14	EXT TRIG (Input)
3	EXT START (Input)	15	EXT STOP (Input)
4	EXT RESET (Input)	16	INTEG BUSY (Output)
5	No Connection	17	No Connection
6	No Connection	18	No Connection
7	No Connection	19	No Connection
8	No Connection	20	No Connection
9	No Connection	21	No Connection
10	DA 3ch (Output)	22	DA 4ch (Output)
11	DA 1ch (Output)	23	DA 2ch (Output)
12	DA COM	24	DA COM



/CMP specifications

remote control, 4 channel D/A output, 4 channel comparator output

Pin No.	Signal	Pin No.	Signal
1	DIGITAL COM	13	DIGITAL COM
2	EXT HOLD (Input)	14	EXT TRIG (Input)
3	RELAY 3ch NC	15	RELAY 4chrNC
4	COM	16	СОМ
5	L _{NO}	17	L _{NO}
6	RELAY 1ch NC	18	RELAY 2ch NC
7	СОМ	19	СОМ
8	L _{NO}	20	L _{NO}
9	No Connection	21	No Connection
10	DA 3ch (Output)	22	DA 4ch (Output)
11	DA 1ch (Output)	23	DA 2ch (Output)
12	DA COM	24	DA COM

Page 9-5 "Note"

Note.

• For products with firmware version up to 3.11, the D/A output is 0 V, if you set the D/A output item to $\bar{n}RLH$ (computation). For products with firmware version 3.21 or later, the D/A output is generated with the range rating of the voltage as 5.0 VFS, if you set the D/A output item to 586 (computation) and the computing equation to R 용답 및 (see sections 4.9 to 4.11). If you set the computing equation to anything else, the D/A output is 0 V.

Page 13-9 "13.1 Commands"

RA/RA? Sets current range or queries the current setting.

Syntax

RA m<terminator>

"m" indicates current range.

m= 4: 0.5 A range

5: 1 A range

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21: 5 <u>mA range</u>

22: 10 mA range

23: 20 <u>mA range</u>

24: 50 mA range

25: 100 <u>mA range</u>

26: 200 mA range

Page 16-2 "Current"

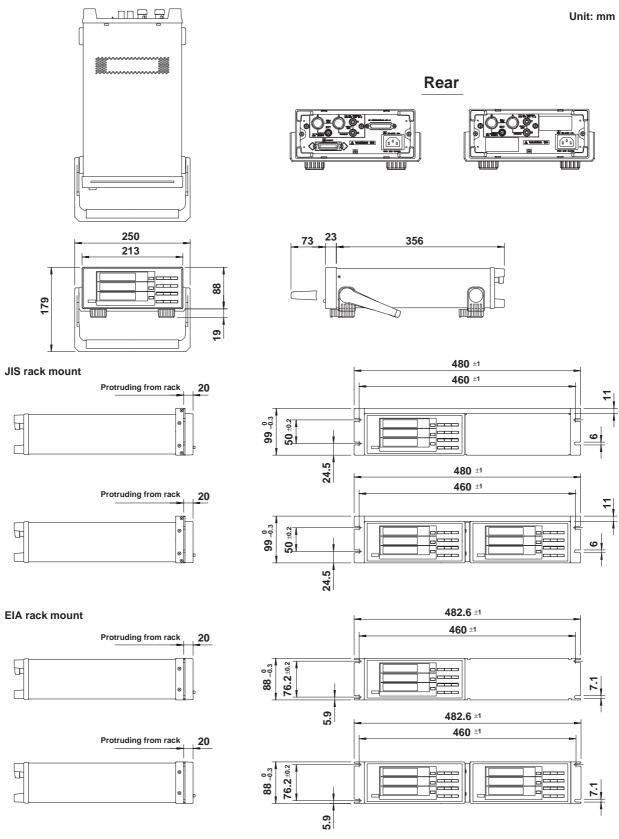
Item	Specification	
Input impedance	Direct input:	Δ Approx. 6 mΩ + 100 mΩ (max)* + approx. 0.1 μH in the 20 A to 0.5 A range. * Factory Default
		Approx. 500 mΩ in the 200 mA to 5 mA range.

Page 16-9 "16.14 General Specifications"

Item	Specification	
Emission	Complying Standard: <u>EN61326 Class A</u>	
	EN55011-Group1, Class A	
	This is a Class A product for industrial environment. In a domestic environment, this product ma	
	cause radio interference in which cause the user may be required to take adequate measures.	
	Cable Condition:	
	External Senser Input (installed /EX1 or /EX2 option)	
	500 mm max	
	External Input/Output Signals (installed /DA4, /CMP option)	
	To use shielded wires	
Immunity	Complying Standard: EN61326 annex A	
•	Annex A (normative): Immunity test requirements for equipment intended for	
	use in industrial locations.	
Safety standard	Complying Standard: EN61010	
•	Overvoltage Category II	
	Pollution degree 2	

Equipment that is connected to the WT200 through the GP-IB, RS-232-C, or Ext. I/O connector must comply with applicable safety standards (IEC60950 or IEC61010-1, for example) or some equivalent standard.

Page 16-10 "16.15 External Dimensions"



Unless other wise spcified, tolerance is $\pm 3\%$ (However, tolerance is ± 0.3 mm when below 10 mm)