User's Manual

DL7440/DL7480 Digital Oscilloscope Power Supply Analysis Function (/G4 Option)

Notice of Alterations

Please make the following alterations to the User's Manual IM701450-61E (see underlined text).

Page 5 "Waveform Computation on Power Analysis Parameters"

As with the standard waveform computation, waveform computation such as <u>Instantaneous</u> power, impedance, Joule integral, power spectrum, and harmonics can be performed on the displayed waveform (within the display record length), and the computed results can be displayed using waveforms (computed waveforms).

Page 16 "Determining the Power Analysis Parameter Values"

| Power Analysis Parameter | Method of Determination, Equation | | |
|---|--|--|--|
| : | : | | |
| Active power P [W] | $\frac{1}{T} \int_0^T u(t) \cdot i(t) dt \qquad \underline{u(t) \cdot i(t) : Instantaneous Power}$ | | |
| i | : | | |
| Joule integral I ² t [A ² s] | $\int_0^\tau i^2(t)dt$ | | |

Page 16 "Note"

Note.

- u(t) and i(t) denote the sampled data of the voltage signal and the current signal, respectively.
- You cannot select power analysis parameters on the trend display (Measurement Trend) of the Web server function of the DL7400.

Page 18 "Setting the Equation, Scaling, Unit, and Smoothing"

For the setup procedure of the five operators of power analysis parameters, see the pages indicated below. For a description of the Trend operator, see section 8 in this manual.

- Power (Instantaneous power) -> Page 19
- I²t (Joule integral) -> Page 20
- Harmonics -> Page 21

- Z (impedance) -> Page 19
- PS (power spectrum) -> Page 20

Page 19

Setting the Computed Waveform of Instantaneous Power (When Power Was Selected in Step 4 on Page 18)

Page 23 "Operators"

You can select the operator for Math1 and Math2. For a description of the Trend operator, see section 8 in this manual.

| Power (<u>Instantaneous</u> power) | Z (impedance) | I ² t (Joule integral) |
|-------------------------------------|---------------|-----------------------------------|
| PS (power spectrum) | Harmonics | |

Page 49 "Specifications"

| Item | Specification | |
|---|---|--|
| | | |
| Waveform computation on power analysis parameters | As with the standard waveform computation, performs waveform computation such as Instantaneous power, impedance, Joule integral, power spectrum, and harmonics. | |

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active power...... 19, 25

