

**3181-01**(Single phase)  
DIGITAL POWER Hi TESTER



**RMS**

The ideal system for efficiency evolution and inspection of household appliances

- A compact, lightweight instrument designed to measure power consumption and/or integrated power in electrical equipment.
- True RMS voltage and current measurements.
- Simultaneous outputting of power, voltage, and current measurements.

Note: The 3180 series uses PT and CT, and cannot transmit DC power measurement is impossible for DC-weighted signals (full-wave rectification, half-wave rectification etc.)

**3182·3183**(Single phase)  
DIGITAL POWER Hi TESTER



**RMS**

A Single-Phase Digital Power Meter

- Voltage and current indicated as a true RMS reading.
- Analog output terminal for CH1 (voltage), CH2 (current) and CH3 (Power) values (Simultaneous output in three channels).
- Data output connector for BCD signals, function, range and other instrument status signals.

**3184·3185**(3 phase)  
DIGITAL POWER Hi TESTER



**RMS**

**GP-IB**

3184-02, 3185-02

Measurement Power in 3-Phase Circuit

- Measures voltage, current, and power in both single and 3-phase circuits.  
3184: Up to 20kW (20A-500V)  
3185: Up to 2000W (2A-500V)
- True RMS voltage and current measurements.
- Two analog outputs are provided; one for power (continuous output), and one for the function selected.

■ SPECIFICATIONS

Item	3181-01	3182	3183	3184	3185
Power	200/2000W	200/2000W	20/200W	0.2k/2k/20kW	20/200/2000W
Voltage	250Vrms	200/250Vrms		200/500Vrms	
Current	2/20A	2/20Arms	0.2/2Arms	2/20Arms	0.2/2Arms
Integrated Power	10 <sup>3</sup> ·10 <sup>4</sup> /10 <sup>5</sup> ·10 <sup>6</sup> Wh (with timer)		—		
Accuracy 23±5°C cosφ=1	W/±0.5% rdg. ±0.3% f.s. A/±0.5% rdg. ±0.3% f.s. V/±0.7% rdg. ±1 dgt. Integrator/±1% rdg. ±1 dgt. (at 1/40 ~ 6/5 of f.s.)		W/±0.5% rdg. ±0.3% f.s. A/±0.5% rdg. ±0.3% f.s. V/±0.7% rdg. ±1 dgt.		±0.5% rdg. ±6 dgt.
Display	1999 (3½-digit) LCD/ Integrator/999999LCD		1999 (3½-digit) LED		
Max. Input Voltage	250Vrms	250Vrms		600Vrms	
Max. Input Current	15Arms	15Arms	4Arms	30Arms	4Arms
Output Terminal	2V DC f.s. × 3 (W·V·A – analog) 1Ω> CMOS level Hi = 5V, Lo = 0V (digital)			2V DC f.s. × 2 (W continuous, corresponding to function setting)	
Frequency Characteristics	W±1%, V·A±0.5% (40~500Hz)			W±1%, V·A±0.5% (40~1kHz)	
Effect of p.f.	±0.8% rdg. > (at cosφ = 0.5)				
Temperature Characteristics	±0.1% f.s./°C >		±2% > (at 0 ~ 40°C)		
Crest Factor	The lesser of 2 at full scale value				
Sampling Rate	3 times/s	5 times/s		2.5 times/s	
Power Supply	100/120/220/240V AC ±15%		100/120/220/240V AC ±15% (Specify at order)		
Dimensions	85H × 218W × 240D mm·3181-01–2.6kg/3182–2.1kg/3184–3kg				
Accessories	3A midget type fuse (1), power cord (1)		0.5A Fuse (1), power cord (1)		
Ordering Information	—			3184-01(withBCD) 3184-02(withGP-IB)	3185-01(withBCD) 3185-02(withGP-IB)
Optional Accessories	9084 Carrying Case 3171 Digital Printer		9084 Carrying Case		9084 Carrying Case 9151 GP-IB Connector Cable (see p. 30)

3160·3180 Series Common Optional Accessories  
9149 Carrying case (for two meters)