

TES

Reliable in Quality

AFLEX 3003 Flexible VA Harmonics Tester AFLEX 3005 Flexible Power Quality Tester

Power Analysis (3005)

- W, KW, H.P.
- VA, KVA, VAR, KVAR
- PF, Phase Angle (Φ)
- Energy (WH, KWH)
- Dual displays (W+PF, VA+KVAR)
- Balanced 3 Φ Power Quality
- Balanced 3 Φ Sequence

Harmonics Analysis (3003, 3005)

- True RMS (V and A)
- 3000A
- Harmonic Analysis (V and A) to the 50th Order in % and Magnitude
- Non-interrupted Harmonic Analysis
- Analysis of %THD-F and C.F.
- Fast Peak Function (33 μ s and 39 μ s)
- Programmable PT (1 to 250) Ratios
- Auto-Power-Off: 30 minutes



Flexible probe, different from normal clamp meter, can pass through obstacles at will and wind many conducting wires simultaneously, max. diameter 170mm



EN61010-2-032
CAT III 600V
Pollution Degree 2

AFLEX 3000 Flexible AC Current Probe

- Two Current Ranges: 300A and 3000A
- Two Output Sensitivity (300mV and 1V), Versatile for Measuring Instruments
- Input Protection Up to 600V
- Suitable for Any Electrical System
- Wide Bandwidth, Low Phase Shift
- Low Battery Indication

AFLEX 6300 Graphic Power Quality Analyzer

- Analysis for Single Phase and Balanced 3 Phase Systems
 - True RMS Value (V and I)
 - Active Power (KW), Apparent (KVA) and Reactive Power (KVAR)
 - Power Factor (PF), Phase Angle (Φ)
 - Energy (WH, KWH, KVARH, PFH)
- (more features inside)



TES

TES ELECTRICAL ELECTRONIC CORP.

7F, No.31 Lane 513, Rui Guang Rd., Neihu Dist, Taipei, Taiwan, R.O.C.

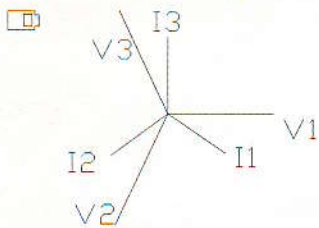
Tel : (02) 2799-3660 Fax : 886-2-2799-5099

E-mail : tes@ms9.hinet.net <http://www.tes.com.tw>

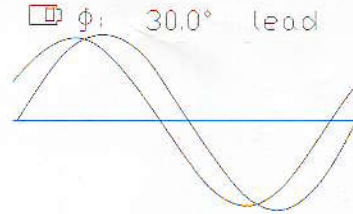
AFLEX 6300 Additional Features:

- Display of Overlapped Voltage and Current Waveform
- Maximum Demand (MD in W, KW, MW) with Programmable Period
- Harmonics Analysis (V and I) to the 50th Order
- Display of 25 Harmonics in One Screen with Waveform
- Display of Waveform with Peak Values (512 Samples / Period), Datalogging of 32, 64, 128 or 256 Points/Cycles
- Analysis of Total Harmonic Distortion (%THD-F)
- Graphic Phasor Diagram
- Capture 128 Transient Events (Time+Cycles+Faults) with Programmable Threshold (%), Can Also be Reviewed in LCD
- 50000 Records with Programmable Interval (1 to 6000 seconds)
- Output of Waveform, Power Parameters and 50 Harmonics at Command
- Large Dot Matrix LCD Display with Backlight
- Optical Isolated RS-232C Interface
- Smart Datalogging to Save Battery Power for Long-term Monitoring
- Built-in Calendar Clock for Data Logging
- Programmable PT (1 to 3000) Ratios

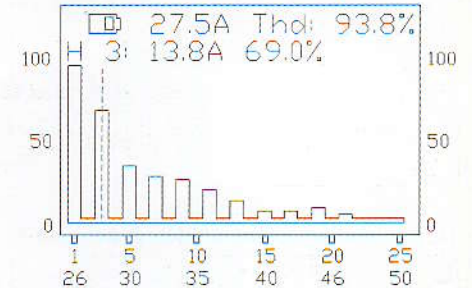
3-Phase Phasor Diagram



Display of Voltage / Current Waveform



Harmonics Analysis of Voltage / Current



AFLEX 3000

Specifications (23°C ± 3°C, 50/60Hz, conductor located at the center of the flexible probe)

	Range			
	300A AC		3000A AC	
Output Select	300mV	1V	300mV	1V
Output Signal	1mV/A	3.33mV/A	0.1mV/A	0.333mV/A
Accuracy	1% of full scale		1% of full scale	
Linearity (10 to 100%)	0.2% of reading		0.2% of reading	
Position Sensitivity	2% of range		2% of range	
External Field (200 mm from the head, < 40A/m)	1% of range		1% of range	
Phase Error	< ±1°		< ±1°	
Temperature Coefficient (0°C to 70°C)	0.02% of reading / °C		0.02% of reading / °C	

DC offset : < 20mVDC (300A AC range)
< 100mVDC (3000A AC range)

Noise : < 2mVAC_{RMS}

Bandwidth (-3dB) : 10 to 10 KHz

Load Impedance : 1KΩ

Battery : 2 x AA 1.5V Alkaline (2000mAhrs)

Battery Life : 300 Hours

Probe Length : 3000-24 24 in / 610 mm

3000-36 36 in / 915 mm

3000-48 48 in / 1220 mm

Minimum Bending Diameter : 35mm

Connector Diameter : 23mm

Cable Diameter : 14mm

Cable Length from Probe to Box : 170mm

Cable Length from Box to Output : 170mm

Operating Temperature : -20°C to 85°C

Operating Humidity : 15% to 85% RH

Storage Temperature : -20°C to 85°C

Storage Humidity : 15% to 85% RH

Dimension : 130 mm (L) x 80 mm (W) x 43 mm (H),
5.1" (L) x 3.1" (W) x 1.7" (H)

Weight : 430g

3005 / AFLEX 6300

Specifications (23°C ± 5°C) Please refer to users manual for more detailed and up-to-date description of specifications.

AFLEX 3005 / 6300

AC Watt (45~65 Hz, PF 0.5 to 1, CT = 1)

Range	Resolution	Accuracy of Readings
100.0 - 999.9 W	0.1W	2% ± 8dgts
1.000 - 9.999 KW	0.001 KW	2% ± 8dgts
10.00 - 99.99 KW	0.01 KW	2% ± 8dgts
100.0 - 999.9 KW	0.1 KW	2% ± 8dgts
1000 - 9999 KW	1 KW	2% ± 8dgts

Power Factor (PF)

Range	Resolution	Accuracy of Readings
0.00 - 1.00	0.01	±1.5% ± 8 digits

Phase Angle (Φ)

Range	Resolution	Accuracy of Readings
-180° to 180° (0° to 360°)	0.1°	± 1° ± 2 digits

AFLEX 3003 / 3005 / 6300

AC Current (45~65 Hz, True RMS)

Range	Range	Resolution	Accuracy of Readings
30 - 300 A	0.00 - 300 A	0.1 A	1% of range ± 8dgts
300 - 999.9 A	100.0 - 999.9 A	0.1 A	1% of range ± 8dgts
1000 - 3000 A	1000 - 3000 A	1 A	1% of range ± 8dgts

Harmonics of AC Voltage in % and Magnitude (1 to 50th order)

Range	Resolution	Accuracy in %	Resolution	Accuracy In Magnitude
50 - 600 V	0.1%	±0.5%	0.1V	±0.5% ± 0.5V

Harmonics of ACA in % and Magnitude (1 to 50th order)

Range	Resolution	Accuracy of Readings In %	Resolution	Accuracy of Readings In Magnitude
10.0 - 300 A	0.1%	±1.0%	0.1A	±1.0% of range ± 0.8A
1000 - 3000 A	0.1%	±1.0%	1A	±1.0% of range ± 3A

Total Harmonic Distortion (%THD-F, 1 to 50th order)

Range	Resolution	Accuracy of Readings
0.0 - 999.9%	0.1%	± 0.5% ± 5 digits

AC Voltage (45~65 Hz, True RMS)

Range	Resolution	Accuracy of Readings
3 V - 600 V	0.1 V	±0.5% ± 5dgts

- Conductor Size : 150mm (approx.)
- Battery Type : 1.5V SUM-3 x 2
- Display : 128 x 64 Dot Matrix
- Power Consumption : 10mA (approx.)
- Auto-Power-Off : 15 minutes
- LCD update rate : 2 times / sec.
- Dimension : 130 mm (L) x 80 mm (W) x 43 mm (H) , 5.1" (L) x 3.1" (W) x 1.7" (H)
- Accessories : Test lead x 1 pair, Users manual x 1, Batteries 1.5V x 2
- No. of Samples / Period : 512 (V & A), 256 (W)
- Operating Temperature : -10°C to 50°C
- Operating Humidity : < 85% RH
- Storage Temperature : -20°C to 60°C
- Storage Humidity : < 75% RH
- Weight : 450 g