



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 ( $\Phi$ )
- Energy (WH, KWH)
- Dual displays (W+PF, VA+KVAR)
- Balanced 3 $\Phi$  Power Quality
- Balanced 3 $\Phi$  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 $\mu$ s and 39 $\mu$ 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 ( $\Phi$ )
- Energy (WH, KWH, KVARH, PFH)  
(more features inside)



# TES

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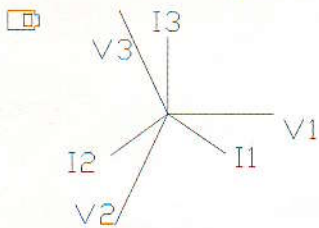
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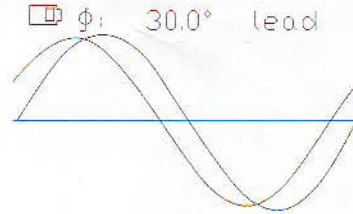
## AFLEX 6300 Additional Features:

- Display of Overlapped Voltage and Current Waveform
- Maximum Demand (MD in W, KW, MW) with Programmable Period
- Harmonics Analysis (V and I) to the 50<sup>th</sup> 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

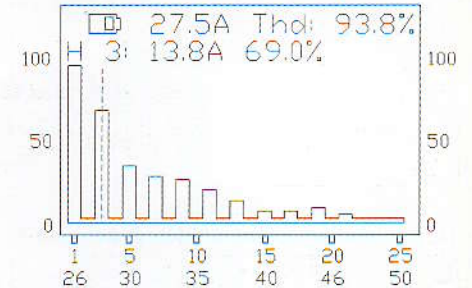
3-Phase Phasor Diagram



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<sub>RMS</sub>

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 50<sup>th</sup> 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 50<sup>th</sup> 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 50<sup>th</sup> 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

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