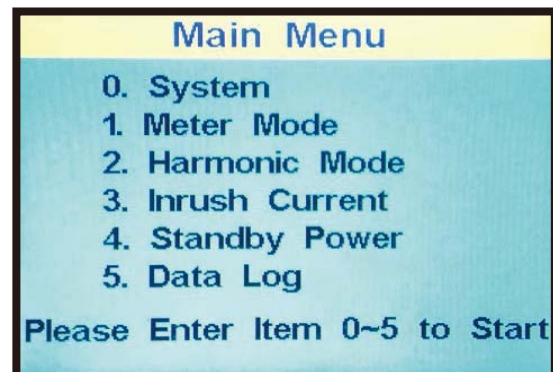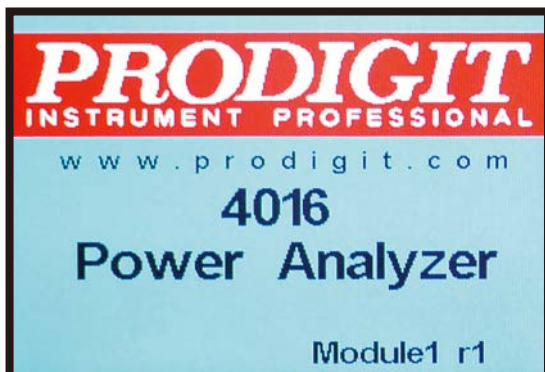# 4016 Digital Power Analyzer（500V / 20A）

Features

- Less then 0.001W standby power measurements meet IEC62301 Energy Star 0.03W standby power.
- Harmonic analysis to the 50thorder
- 6 voltage range and 18 current range
- Up to 800Vpeak/200Apeak input
- Color graphical display

- Data log with Vrms, Arms, Watt, PF,VTHD and ITHD
- The built-in Power switch can be Controlled the ON/OFF degree angle (0~359˚) according to of the Voltage source phase angle
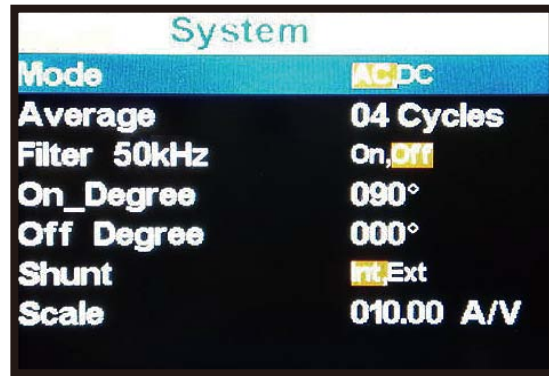- RS-232, GPIB, USB, Ethernet Interface (Option)

Key Functions
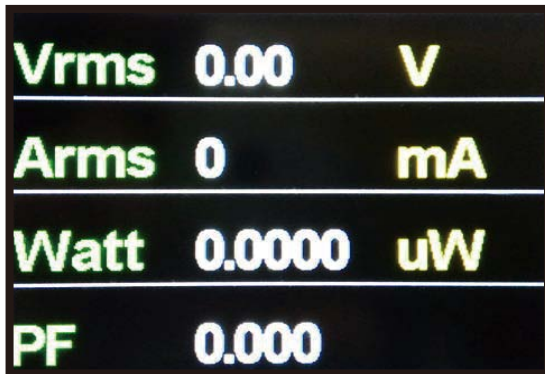
- Power ON display and main menu

System

- Mode : AC/DC
- Average : 1~64
- 50KHz Filter : ON/OFF
- ON Degree : 0~359˚
- OFF Degree : 0~359˚
- Shunt : INT/EXT can use internal Shunt or external current transformer (CT).
- Scale : Current-to-Voltage ratio when using an external current transformer (EXT)

Meter Mode

- There are Digital numeral mode and Graphic mode display, the standard is Digital numeral mode.
- Press Graph key to switch to graph display mode and press again to switch back to digital numeral mode
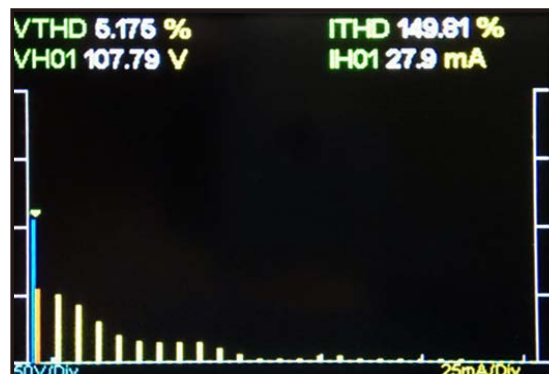- Press Edit key to select the display parameters, Vrms, Arms, Watt, PF, VTHD, ITHD, VA, Freq
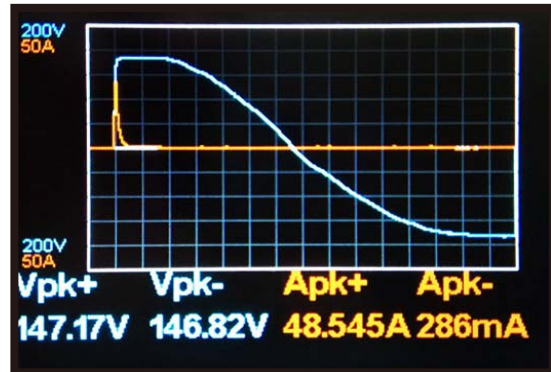

Harmonic Mode

- There are Digital numeral mode and Graphic mode display, the standard is Digital numeral mode.
- Press Graph key to switch to graph display mode and press again to switch back to digital numeral mode

Press Up and Down keys to change the page, press left and right to switch V or I

Inrush Current

● Press Edit Key to edit Voltage and Current range and built-in Power Switch's turn ON / OFF degree angle 0~359˚

```
        Inrush  Set
Graph  Scroll  Time      000.00 ms
V_Range
20V,40V,80V,200V,400V,800V
I_Range
10A,20A,40A,50A,100A,200A
On  Degree              090°
Off Degree              000°
```

```
200V
50A

200V
50A
Vpk+        Vpk-        Apk+      Apk-
147.17V   146.82V   48.545A  286mA
```
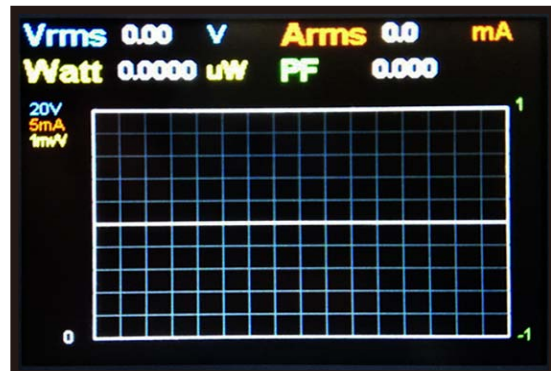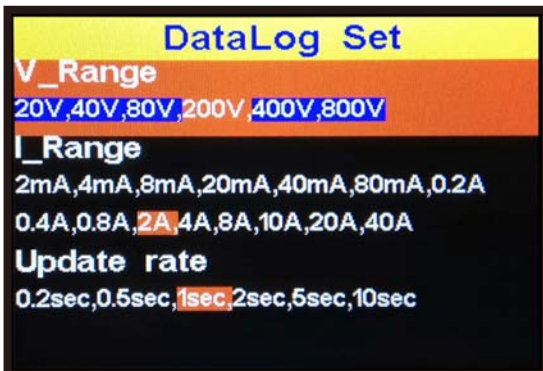
Standby Power

● Press Edit key to edit voltage and current range and test countdown time suitable for the EnergyStar test method.
● See the standby power test method for details.

```
         Standby  Set
V_Range
20V,40V,80V,200V,400V,800V
I_Range
2mA,4mA,8mA,20mA,40mA,80mA,0.2A
0.4A,0.8A,2A,4A,8A,10A,20A,40A
Countdown              On,Off
00Hr  00Min  00Sec
```

```
Vrms     0.00             V
Arms     0.0              mA
Watt     0.0000           uW
VA       0.0000           uVA
Time     0000 D 00 H 00 M 00 s
Whr                       uWhr
```

Data Log

● Press Edit to edit the item.
● Page 1 display Vrms, Arms, Watt, PF
● Page 2 display VTHD, ITHD

```
         DataLog  Set
V_Range
20V,40V,80V,200V,400V,800V
I_Range
2mA,4mA,8mA,20mA,40mA,80mA,0.2A
0.4A,0.8A,2A,4A,8A,10A,20A,40A
Update  rate
0.2sec,0.5sec,1sec,2sec,5sec,10sec
```

```
Vrms 0.00    V      Arms 0.0       mA
Watt 0.0000 uW    PF     0.000
20V
5mA
1mW                                    1




                                       0

0                                     -1
```

Press Up and Down keys to change the page

Specifications

MODEL			4016
ACV meter		**Range**	20Vpeak / 0.001V 200Vpeak / 0.01V 40Vpeak / 0.001V 400Vpeak / 0.01V 80Vpeak / 0.01V 800Vpeak / 0.1V
		Max. Input	**800Vpeak / 500Vrms**
		Accuracy	±0.1% of (Reading + Range)
ACA	**Shunt 0.05A (10Ω)**	**Range**	0.002Apeak / 0.1uA 0.02Apeak / 0.001mA 0.004Apeak / 0.1uA 0.04Apeak / 0.001mA 0.008Apeak / 0.001mA 0.08Apeak / 0.01mA
		Max. Input	**0.08Apeak / 0.05Arms**
	Shunt 0.5A (1Ω)	**Range**	0.2Apeak / 0.01mA 0.4Apeak / 0.01mA 0.8Apeak / 0.1mA
		Max. Input	**0.8Apeak / 0.5Arms**
	Shunt 5A (0.04Ω)	**Range**	2Apeak / 0.1mA 4Apeak / 0.1mA 8Apeak / 0.001A
		Max. Input	**8Apeak / 5Arms**
	Shunt 20A (0.005 Ω)	**Range**	10Apeak / 0.001A 50Apeak / 0.001A 20Apeak / 0.001A 100Apeak / 0.01A 40Apeak / 0.001A 200Apeak / 0.01A
		Max. Input	**200Apeak / 20Arms**
	Accuracy		±0.1% of (Reading + Range) ±2% of (Reading + Range, for Inrush)
ACW		**Range**	Vrange*Arange
		Accuracy	±0.2% of (Reading + Range)
DCV		**Range**	Same as AC
		Accuracy	Same as AC
DCA		**Range**	Same as AC
		Accuracy	Same as AC
DCW		**Range**	Same as AC
		Accuracy	Same as AC
PF		**Range**	±0.001~1.000/0.001
		Accuracy	1% of (Reading + Range, Corresponds to V and A)
Frequency		**Range**	20~1000/0.1Hz
		Accuracy	± 0.1 Hz
V/A Harmonic		**Number**	1~50 th/ Same as ACV, ACA meter
		Accuracy	±0.5% of (Reading + Range)
V/A THD		**Range**	0%~255%/0.001%
		Accuracy	±0.5% of (Reading + Range)
Low Pass Filter (V & A)			50KHz
Interface (Option)			RS-232, GPIB, USB, Ethernet

Order Information

▶ **4016** Digital Power Analyzer （500V / 20A）   Optional interface：❶ GPIB Card ❷ RS232 Card ❸ USB Card ❹ LAN Card