

# 6010-1

## 單組 Charger / Adapter / LED Driver 自動測試系統



基本版



標準版



加值版



完整版

### 特 性

- 可依產品測試需求，選擇所需要的設備配置版本（基本版 / 標準版 / 加值版 / 完整版）
- 適用於充電器，適配器(adapter)及LED電源之多功能測試系統
- 極高性價比，全功能模組化設計之測試系統
- Windows 7 以上（含）的作業環境
- 接受客製化訂製
- 開放性架構軟體平台
  1. 支援相關硬體擴充
  2. 測試項目編輯功能
  3. 測試程式編輯功能
  4. 統計分析報表編輯功能
  5. 線上儀控功能
  6. 使用者權限設定
  7. 支援 Bar Code Reader

## 6010 Charger/Adapter/LED Driver 測試項目與設備配置表

測試項目	儀器設備							
	AC Source	3340F / G Series LED DC Load	4031 / 4032 Timing & Noise	4013 (20A) Power Meter	4015A Power Meter	5061 OVP Source	5303 AVR	60102 Mainframe
<b>輸出特性測試 Output Performances</b>								
輸出電壓 Output Voltage	✓	✓						✓
輸出電流 Output Current	✓	✓						✓
測試中調整 Output adjust	✓	✓						✓
效率 Efficiency	✓	✓						✓
漣波電壓 Ripple Voltage	✓	✓	✓					✓
Brown-In Test	✓	✓						✓
Brown-Out Test	✓	✓						✓
<b>輸入特性測試 Input Characteristics</b>								
輸入有效值電流 Input RMS Current	✓	✓		✓	✓			✓
輸入頻率 Input Frequency	✓	✓		✓	✓			✓
輸入功率 Input Power	✓	✓		✓	✓			✓
無載功率 No Load Power Consumption	✓	✓		✓	✓			✓
輸入功率因素 Input Power Factor	✓	✓		✓	✓			✓
輸入湧浪電流 Input Inrush Current	✓	✓		✓	✓		✓	✓
總諧波失真 Total Harmonic Distortion	✓	✓			✓			✓
IEC-61000-4-11 PQT Test	✓	✓						✓
<b>調變測試 Regulation Tests</b>								
電源調變 Line Regulation	✓	✓						✓
負載調變 Load Regulation	✓	✓						✓
組合調變 Combine Regulation	✓	✓						✓
<b>時序與暫態特性測試 Timing &amp; Transient</b>								
開機時間 Turn ON (Set-Up) Time	✓	✓	✓					✓
關機時間 Turn OFF (Hold-Up) Time	✓	✓	✓					✓
上升時間 Rise Time	✓	✓	✓					✓
下降時間 Fall Time	✓	✓	✓					✓
<b>保護特性測試 Protection Tests</b>								
短路保護 Short Circuit	✓	✓						✓
過電壓保護 OV Protection	✓	✓				✓		✓
過電流保護 OC Protection	✓	✓						✓
過功率保護測試 OP Protection	✓	✓						✓
<b>Others</b>								
TTL 控制訊號 ( TTLControl )	✓	✓	✓					✓
繼電器控制 ( Relay Control )	✓	✓	✓					✓

## 6010 Charger/Adapter/LED Driver 單組 測試系統設備快選表

測試項目	儀器設備			
	6010-01-A 基本版	6010-01-B 標準版	6010-01-C 加值版	6010-01-D 完整版
<b>輸出特性測試 Output Performances</b>				
輸出電壓 Output Voltage	<input checked="" type="radio"/>			
輸出電流 Output Current	<input checked="" type="radio"/>			
測試中調整 Output adjust	<input checked="" type="radio"/>			
效率 Efficiency	<input checked="" type="radio"/>			
漣波電壓 Ripple Voltage		<input checked="" type="radio"/>		
Brown-In Test	<input checked="" type="radio"/>			
Brown-Out Test	<input checked="" type="radio"/>			
<b>輸入特性測試 Input Characteristics</b>				
輸入有效值電流 Input RMS Current	<input checked="" type="radio"/>			
輸入頻率 Input Frequency	<input checked="" type="radio"/>			
輸入功率 Input Power	<input checked="" type="radio"/>			
無載功率 No Load Power Consumption	<input checked="" type="radio"/>			
輸入功率因素 Input Power Factor	<input checked="" type="radio"/>			
輸入湧浪電流 Input Inrush Current				<input checked="" type="radio"/>
總諧波失真 Total Harmonic Distortion			<input checked="" type="radio"/>	
IEC-61000-4-11 PQT Test	<input checked="" type="radio"/>			
<b>調變測試 Regulation Tests</b>				
電源調變 Line Regulation	<input checked="" type="radio"/>			
負載調變 Load Regulation	<input checked="" type="radio"/>			
組合調變 Combine Regulation	<input checked="" type="radio"/>			
<b>時序與暫態特性測試 Timing &amp; Transient</b>				
開機時間 Turn ON (Set-Up) Time		<input checked="" type="radio"/>		
關機時間 Turn OFF (Hold-Up) Time		<input checked="" type="radio"/>		
上升時間 Rise Time		<input checked="" type="radio"/>		
下降時間 Fall Time		<input checked="" type="radio"/>		
<b>保護特性測試 Protection Tests</b>				
短路保護 Short Circuit	<input checked="" type="radio"/>			
過電壓保護 OV Protection				<input checked="" type="radio"/>
過電流保護 OC Protection	<input checked="" type="radio"/>			
過功率保護測試 OP Protection	<input checked="" type="radio"/>			
<b>Others</b>				
TTL 控制訊號 ( TTLControl )		<input checked="" type="radio"/>		
繼電器控制 ( Relay Control )		<input checked="" type="radio"/>		

6010-01-A Charger/Adapter/LED Driver 基本版單組測試系統架構組成如表所示，只需AC Source (with Power Meter) and DC Load (3340F/G 系列) 即可。組成圖示如下

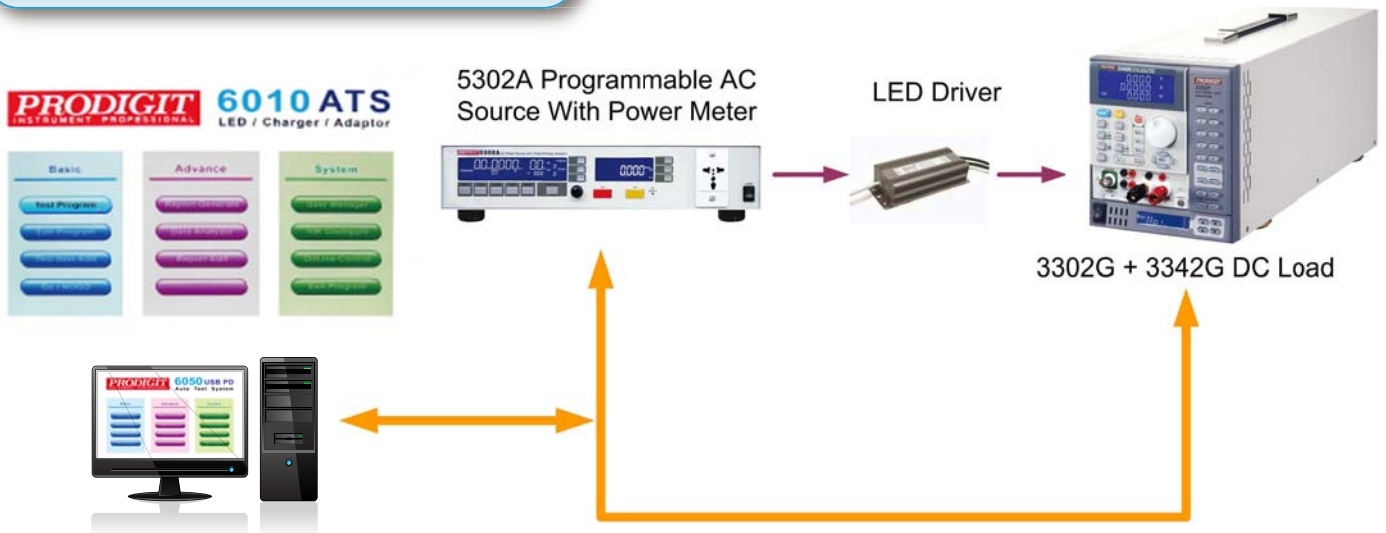


3302G + 3342G DC Load



5302A AC Source (With Power Meter)

### 6010-01-A 基本版系統方塊圖



### 6010-01-A 基本版可測試項目如下表

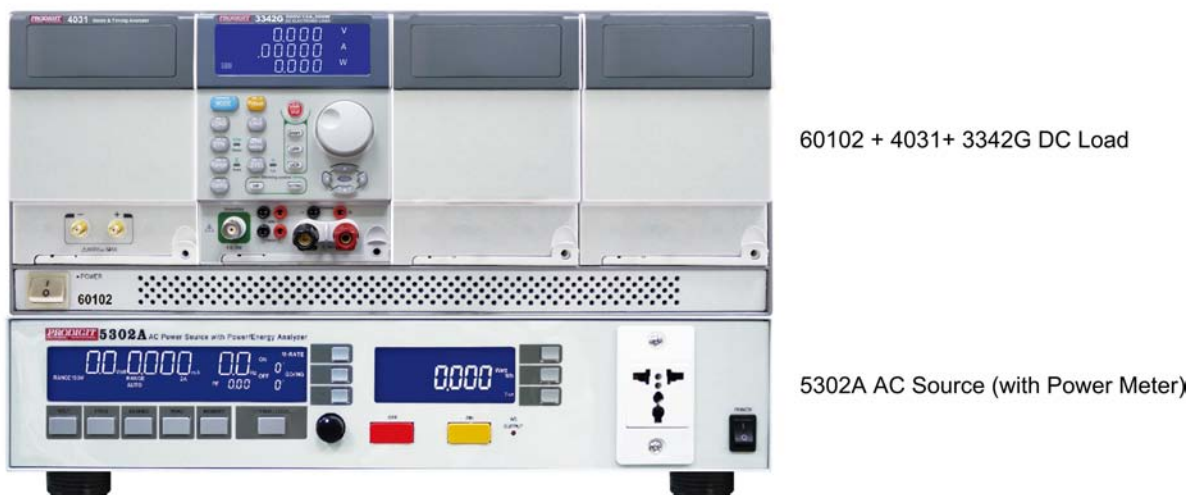
輸出特性測試 <b>Output Performances</b>	輸入特性測試 <b>Input Characteristics</b>
輸出電壓 Output Voltage	輸入有效值電流 Input RMS Current
輸出電流 Output Current	輸入頻率 Input Frequency
測試中調整 Output adjust	輸入功率 Input Power
平均效率 Average Efficiency	無載功率 No Load Power Consumption
Brown-In Test	輸入功率因素 Input Power Factor
Brown-In Test	IEC-61000-4-11 PQT Test
調變測試 <b>Regulation Tests</b>	保護特性測試 <b>Protection Tests</b>
電源調變 Line Regulation	短路保護 Short Circuit
負載調變 Load Regulation	過電流保護 OC Protection
組合調變 Combine Regulation	過功率保護測試 OP Protection

## 6010-01-A 基本版設備配置表

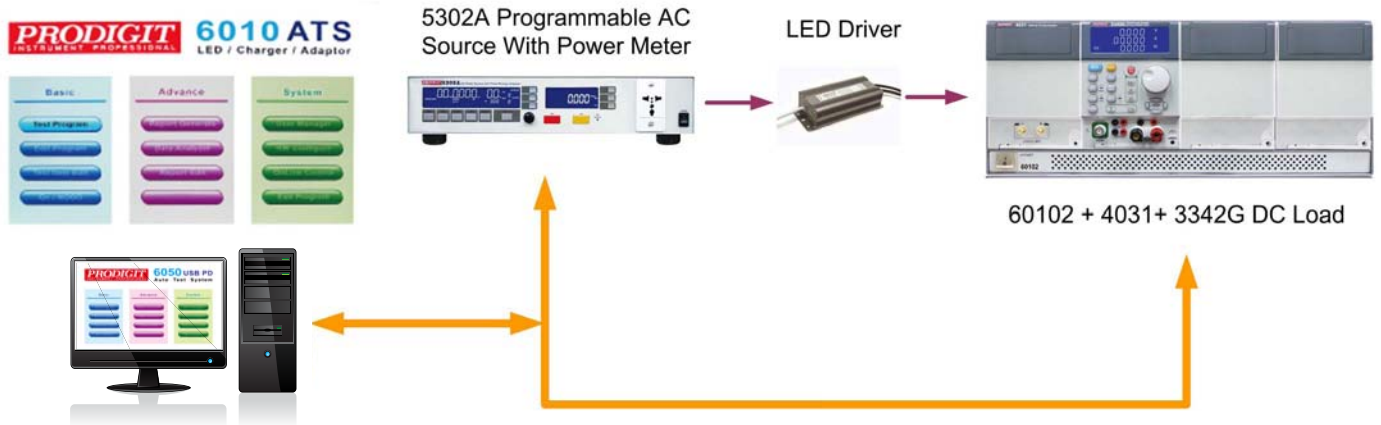
Equipment Model No.		Qt'y
5302A 270VA AC Power Source		1
3342G Series 300W LED DC Load Module		1
3302G 1 CH Mainframe		1
6010-01 System Software		1
System Controller (PC)		1
CP-104EL-A 1:4 High Speed RS-232 Interface Card		1
Uport 1410 USB to RS-232 4 Port For Note Book		0
System Specifications ( PC or Note Book )		
CPU	i5-3470(3.2GHz) or faster	
SRAM	256KB	
DRAM	4GB or higher	
Hard Driver	500GB or higher	
CD-ROM	40X or faster	
Monitor	22"	
KeyBoard	101 Keys	
I/O	Mouse/Print Port	
System Interface	RS-232	
System I/O	1:4 or 1:8 High Speed RS-232 Card	
○ Choose this interface When the System device use Note Book		

OS : Windows 7.0 or later

6010-01-B 標準版 (基本版 + 4031 Noise & Timing Analyzer) , 即可增加漣波電壓測試及時序與暫態特性測試。組成圖如下



## 6010-01-B 標準版系統方塊圖



## 6010-01-B 標準版增加4031 可增加下列測試項目

### 輸出特性測試 Output Performances

漣波電壓 Ripple Voltage

### 其他 Others

TTL 控制訊號 (TTLControl)

繼電器控制 (Relay Control)

### 時序與暫態特性測試 Timing & Transient

開機時間 Turn ON (Set-Up) Time

關機時間 Turn OFF (Hold-Up) Time

上升時間 Rise Time

下降時間 Fall Time

## 6010-01-B 標準版設備配置表

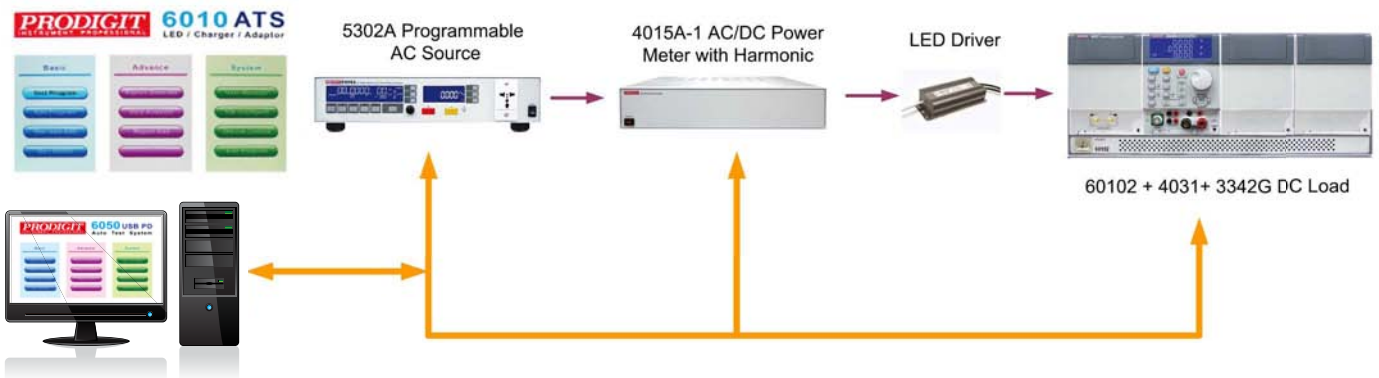
Equipment Model No.		Qt'y
5302A 270VA AC Power Source		1
3342G Series 300W LED DC Load Module		1
60102 2 CH Mainframe		1
4031 Timing & Noise		1
6010-01 System Software		1
System Controller (PC)		1
CP-104EL-A 1:4 High Speed RS-232 Interface Card		1
Uport 1410 USB to RS-232 4 Port For Note Book		0
System Specifications ( PC or Note Book )		
CPU	i5-3470(3.2GHz) or faster	
SRAM	256KB	
DRAM	4GB or higher	
Hard Driver	500GB or higher	
CD-ROM	40X or faster	
Monitor	22"	
KeyBoard	101 Keys	
I/O	Mouse/Print Port	
System Interface	RS-232	
System I/O	1:4 or 1:8 High Speed RS-232 Card	
0 Choose this interface When the System device use Note Book		

OS : Windows 7.0 or later

6010-01-C 加值版 (標準版 + 4015A Power Meter with Harmonic) 即可增加總諧波失真測。組成圖如下



### 6010-01-C 加值版系統方塊圖



### 6010-01-C 加值版增加4015 可增加下列測試項目

輸入特性測試 Input Characteristics

總諧波失真 Total Harmonic Distortion

## 6010-01-C 加值版設備配置表

Equipment Model No.		Qt'y
5302A 270VA AC Power Source		1
3342G Series 300W LED DC Load Module		1
60102 2 CH Mainframe		1
4031 Timing & Noise		1
4015A Power Meter with Harmonic		1
6010-01 System Software		1
System Controller (PC)		1
CP-104EL-A 1:4 High Speed RS-232 Interface Card		1
Uport 1410 USB to RS-232 4 Port For Note Book		0
System Specifications ( PC or Note Book )		
CPU	i5-3470(3.2GHz) or faster	
SRAM	256KB	
DRAM	4GB or higher	
Hard Driver	500GB or higher	
CD-ROM	40X or faster	
Monitor	22"	
KeyBoard	101 Keys	
I/O	Mouse/Print Port	
System Interface	RS-232	
System I/O	1:4 or 1:8 High Speed RS-232 Card	
○ Choose this interface When the System device use Note Book		

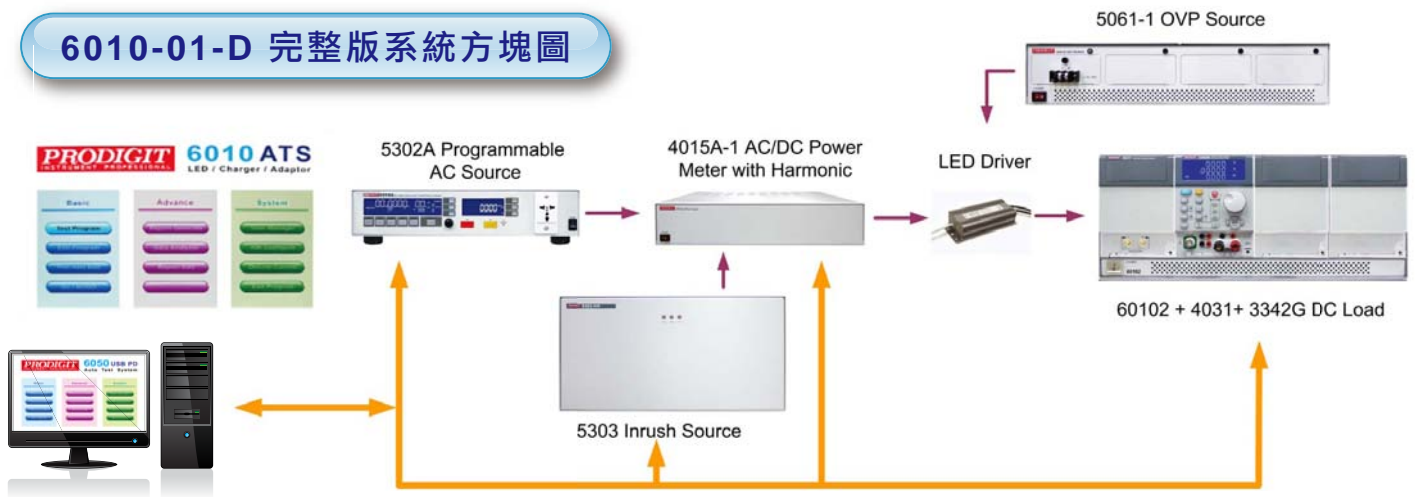
OS : Windows 7.0 or later

6010-01-D 完整版 ( 加值版 + 5061 OVP Source & 5030 Inrush Source ) 即可增加輸入湧浪電流及過電壓測試。組成圖如下





## 6010-01-D 完整版系統方塊圖



## 6010-01-D 完整版增加 5303及5061可增加下列測試項目

### 輸入特性測試 Input Characteristics

輸入湧浪電流 Input Inrush Current

### 保護特性測試 Protection Tests

過電壓保護 OV Protection

## 6010-01-D 完整版設備配置表

Equipment Model No.	Qt'y
5302A 270VA AC Power Source	1
3342G Series 300W LED DC Load Module	1
60102 2 CH Mainframe	1
4031 Timing & Noise	1
4015A Power Meter with Harmonic	1
5061 1 CH 120V OVP Source	1
4015A Power Meter with Harmonic	1
5030 Inrush Source	1
System Controller (PC)	1
CP-104EL-A 1:4 High Speed RS-232 Interface Card	1
Uport 1410 USB to RS-232 4 Port For Note Book	0
<b>System Specifications ( PC or Note Book )</b>	
CPU	i5-3470(3.2GHz) or faster
SRAM	256KB
DRAM	4GB or higher
Hard Driver	500GB or higher
CD-ROM	40X or faster
Monitor	22"
KeyBoard	101 Keys
I/O	Mouse/Print Port
System Interface	RS-232
System I/O	1:4 or 1:8 High Speed RS-232 Card
○ Choose this interface When the System device use Note Book	

OS : Windows 7.0 or later

## 2000VA AC Power Source 規格簡表及可測試項目列表

Model	2000VA AC Power Source
<b>適用測試功能</b>	
<ol style="list-style-type: none"> <li>1. 輸入有效值電流 Input RMS Current</li> <li>2. 輸入頻率 Input Frequency</li> <li>3. 輸入功率 Input Power</li> <li>4. 無載功耗 No Load Power Consumption</li> <li>5. Input Power Factor</li> <li>6. 線性調整率 Line Regulation</li> </ol>	
<b>規格 ( Specifications )</b>	
<b>Power Rating</b>	2000Vmax
<b>Voltage Rating</b>	150Vrms / 300Vrms
<b>Frequency</b>	40~500Hz
<b>Measurements</b>	
<b>ACV meter(Vrms)</b>	150V / 300V
<b>ACA meter(Arms)</b>	1mA / 10mA or 10mA / 100mA Auto range
<b>ACW meter</b>	0.1W / 1W or 1W / 10W or 10W / 100W Auto Range
<b>VA meter</b>	0.1VA / 1VA or 1VA / 10VA or 10VA / 100VA Auto Range
<b>PF meter</b>	0.001
<b>Frequency meter</b>	0.01Hz / 0.1Hz Auto Range
<b>Interface</b>	RS-232

## 5302A 270VA AC Power Source 規格簡表及可適用之功能列表

Model	5302A AC Power Source with Power / Energy Analyzer					
適用測試功能						
1. 輸入有效值電流 Input RMS Current 2. 輸入頻率 Input Frequency 3. 輸入功率 Input Power 4. 無載功耗 No Load Power Consumption 5. Input Power Factor 6. 輸入電源暫降 Input Voltage Sag 7. 線性調整率 Line Regulation 8. 可編成電壓開關機 (ON / OFF) 角度 (0~360度)						
規格 ( Specifications )						
Power Rating	270VAmx					
Voltage Rating	10~150Vrms / 160~300Vrms					
Current Rating	2.0Arms / 1.0Arms					
Frequency	40~70Hz					
Triac Mode	Leading / Trailing Edge					
Angle(ON/OFF)	0~360°					
PQT <IEC 61000-4-11 >	DIP, Interrupt, Variation					
Measurements						
ACV meter(Vrms)	150V / 300V					
ACA meter(Arms)	10mA / 20mA / 200mA / 2000mA (Auto range for AC Source) / 200A(for Inrush)					
ACW meter	1.5W / 3W / 6W / 30W / 60W / 300W / 600W					
DCW meter	Same as 3310F series					
PF meter	±0.01~1.00					
Frequency meter	40~70 Hz					
Interface	RS-232					
External AC Source	300Vrms / 2A / 600VA					

### For USB PD Sag

Duration Time	Dip Voltage (Vin=110Vac/60Hz)			Dip Voltage (Vin=230Vac/50Hz)		
	25%	50%	100%	25%	50%	100%
0.5 Cycle	<b>S</b>	<b>S</b>	<b>S</b>	<b>S</b>	<b>S</b>	<b>S</b>
1 Cycle	<b>S</b>	<b>S</b>	<b>S</b>	<b>S</b>	<b>S</b>	<b>S</b>
5 Cycle	<b>S</b>	<b>R</b>	<b>R</b>	<b>S</b>	<b>R</b>	<b>R</b>
10 Cycle	<b>S</b>	<b>R</b>	<b>R</b>	<b>S</b>	<b>R</b>	<b>R</b>

\* S 表示輸出須符合規格

\* R 表示輸出可自動回復至5V輸出

**Table 1 - Preferred test level and durations for voltage dips**

Class <sup>a</sup>	Test level and durations for voltage dips(ts) (50 Hz/60 Hz)				
Class 1	Case-by-case according to the equipment requirements				
Class 2	0 % during 1/2 cycle	0 % during 1 cycle	70 % during 25/30 <sup>c</sup> cycles		
Class 3	0 % during 1/2 cycle	0 % during 1 cycle	40 % during 10/12 <sup>c</sup> cycles	70 % during 25/30 <sup>c</sup> cycles	80 % during 250/300 <sup>c</sup> cycles
Class X <sup>b</sup>	X	X	X	X	X

a Classes as per IEC 61000-2-4; see Annex B.

b To be defined by product committee. For equipment connected directly or indirectly to the public network, the levels must not be less severe than Class 2.

c "25/30 cycles" means "25 cycles for 50 Hz test" and "30 cycles for 60 Hz test"

**Table 2 - Preferred test level and durations for short interruptions**

Class <sup>a</sup>	Classa Test level and durations for short interruptions (ts) (50 Hz/60 Hz)
Class 1	Case-by-case according to the equipment requirements
Class 2	0 % during 250/300 <sup>c</sup> cycles
Class 3	0 % during 250/300 <sup>c</sup> cycles
Class X <sup>b</sup>	X

a Classes as per IEC 61000-2-4 ; see Annex B.

b To be defined by product committee. For equipment connected directly or indirectly to the public network, the levels must not be less severe than Class 2.

c "250/300 cycles" means "250 cycles for 50 Hz test" and "300 cycles for 60 Hz test"

**Table 3 - Timing of short-term supply voltage variations**

Voltage test level	Time for decreasing voltage (rd)	Time at reduced voltage (rs)	Time for increasing voltage (ri) (50 Hz/60 Hz)
70%	Abrupt	1 cycle	25/30 <sup>b</sup> cycles
X <sup>a</sup>	X <sup>a</sup>	X <sup>a</sup>	X <sup>a</sup>

a To be defined by product committee.

b "25/30 cycles" means "25 cycles for 50 Hz test" and "30 cycles for 60 Hz test".

## 5310 1KVA AC Power Source 規格簡表及可適用之功能列表

Model	5310 1KVA AC Power Source
適用測試功能	
1. 輸入有效值電流 Input RMS Current 2. 輸入頻率 Input Frequency 3. 輸入功率 Input Power 4. 無載功耗 No Load Power Consumption 5. Input Power Factor 6. 輸入電源暫降 Input Voltage Sag 7. 線性調整率 Line Regulation 8. 可編成電壓開關機 (ON / OFF) 角度 (0~360度)	
規格 ( Specifications )	
Power Rating	1000 VAmax
Voltage Rating	150Vpeak/250Vpeak/300Vpeak/350Vpeak/450Vpeak/500Vpeak
Current Rating	7Apeak/5Apeak/3.5Apeak/3Apeak/2.3Apeak/2Apeak
Frequency	40~70Hz
Triac Mode	Leading / Trailing Edge
Angle(ON/OFF)	0~360°
PQT <IEC 61000-4-11 >	DIP, Interrupt, Variation
Measurements	
ACV meter(Vrms)	500V / 0.1V resolution
ACA meter(Arms)	7 A / 0.001A resolution
ACW meter	1000W / 0.001W resolution
PF meter	±0.01~1.00
Frequency meter	40~70 Hz / 0.1Hz resolution
Interface	RS-232

### For USB PD Sag

Duration Time	Dip Voltage (Vin=110Vac/60Hz)			Dip Voltage (Vin=230Vac/50Hz)		
	25%	50%	100%	25%	50%	100%
0.5 Cycle	S	S	S	S	S	S
1 Cycle	S	S	S	S	S	S
5 Cycle	S	R	R	S	R	R
10 Cycle	S	R	R	S	R	R

\* S 表示輸出須符合規格

\* R 表示輸出可自動回復至5V輸出

## 3310G DC E-Load 規格簡表及可測試項目列表

Model	3310G DC E-Load	
<b>適用測試功能</b>		
1. 輸出電壓 Output Voltage	5. 平均效率 Average Efficiency	
2. 輸出電流 Output Current	6. 短路保護 Short Circuit	
3. 動態負載 Dynamic Load	7. 過電流保護 OC Protection	
4. 效率 Efficiency	8. 過功率保護 OP Protection	
<b>規格</b>		
<b>Power</b>	75W, 150W, 300W	
<b>Current</b>	15A, 30A, 60A	
<b>Voltage</b>	60V, 500V	

## 3341G Series LED DC E-Load 規格簡表及可測試項目列表

Model	3341G Series DC E-Load	
<b>適用測試功能</b>		
1. 輸出電壓 Output Voltage	6. 短路保護 Short Circuit	
2. 輸出電流 Output Current	7. 過電流保護 OC Protection	
3. 動態負載 Dynamic Load	8. 過功率保護 OP Protection	
4. 效率 Efficiency	9. 調光測試 DIM Test	
5. 平均效率 Average Efficiency		
<b>規格</b>		
<b>Channel</b>	1	2
<b>Power</b>	300W	150W x 2
<b>Current</b>	12A, 24A	6A x 2
<b>Voltage</b>	300V, 500V	500V

## 4031 Noise & Ripple Meter 規格簡表及可測試項目列表

Model	4031 Noise & Timing Analyzer Module		
<b>適用測試功能</b>			
1. 漣波電壓 Ripple Voltage 2. 開機時間 Turn ON(Set-Up) Time 3. 關機時間 Turn OFF(Hold-Up) Time 4. 上升時間 Rise Time 5. 下降時間 Fall Time			
<b>規格 ( Specifications )</b>			
<b>No. of input channel</b>		<b>1</b>	
<b>Timing Measurement</b>		<b>Ripple Measurement</b>	
<b>Set-up / Hold-up / Rise / Fall Time</b>		<b>Band Width</b>	0 ~ 100 KHz
<b>Voltage range</b>	0 ~ 80 / 600 Vdc	<b>Voltage range</b>	0 ~ 80 / 600 Vdc
<b>Current range</b>	*(1/4F.S.) / (F.S.) Adc	<b>Measurement range</b>	0 ~ 3.2 / 20 Vp-p
<b>Timing range</b>	1 Sec/2 Sec/4 Sec/8 Sec/16 Sec	<b>Resolution</b>	0.001/0.01V
<b>Resolution</b>	1 uS/2uS/4uS/8uS/16uS	<b>Current range</b>	*(1/4F.S.) / (F.S.) Adc
<b>Vth1 / Vth2</b>		<b>Measurement range</b>	*(1/8F.S.) / (1/2F.S.) Ap-p
<b>Voltage range</b>	5% ~ 95% of reading	<b>Resolution</b>	0.001 / 0.01A
<b>Resolution</b>	0.01 V / 0.01V, 0.001A/0.01A	<b>Accuracy</b>	±5% of (Reading + Range)
<b>Accuracy</b>	±2% of (Reading + Range)	<b>Sampling Rate</b>	100KHz
<b>Noise Measurement</b>		<b>Update Rate</b>	50~1000 mS
<b>Low Pass Filter</b>	up to 20 MHz	<b>Resolution</b>	1mS
<b>Voltage range</b>		<b>Dimming Measurement</b>	
<b>Resolution</b>	0.6 / 3Vp-p	<b>Band Width</b>	100KHz
<b>Accuracy</b>	±2% OF reading + 5mV	<b>Current range</b>	*(1/8F.S.) / (1/2F.S.) Adc
<b>Over Shoot Measurement</b>		<b>Resolution</b>	0.001 / 0.01A
<b>Band Width</b>	0 ~ 100 KHz	<b>Accuracy</b>	±5% of (Reading + Range)
<b>Voltage range</b>	0~80 / 600Vdc	<b>Sampling Rate</b>	100KHz
<b>Measurement range</b>	0 ~ 80 / 600 Vdc	<b>Update Rate</b>	50~1000 mS
<b>Resolution</b>	0.01 / 0.1Vdc	<b>Resolution</b>	1mS
<b>Current range</b>	*(1/4F.S.) / (F.S.) Adc	<b>Frequency range</b>	10Hz~35KHz
<b>Measurement range</b>	*(1/4F.S.) / (F.S.) Adc	<b>Resolution</b>	1Hz
<b>Resolution</b>	0.001 / 0.01A	<b>Accuracy</b>	±1% of (Reading + Range)
<b>Accuracy</b>	±5% of (Reading + Range)	<b>Duty(Ton) Range</b>	3uS~90mS
<b>Sampling Rate</b>	100KHz	<b>Resolution</b>	1uS
<b>Update Rate</b>	50~1000 mS	<b>Accuracy</b>	±1% of (Reading + Range)
<b>Resolution</b>	1mS		

## 4013A Power Meter 規格簡表及可測試項目列表

Model	4013A Power Meter
No. of Input Channel	4
適用測試功能	
1. 輸入有效值電流 Input RMS Current	4. 無載功率 No Load Power Consumption
2. 輸入頻率 Input Frequency	5. 輸入功率因素 Input Power Factor
3. 輸入功率 Input Power	
規格	
ACV meter(Vrms)	30V / 300V
Resolution	16-bit
Accuracy	±0.5% of (Reading + Range)
ACA meter(Arms)	20mA / 200mA / 2A / 20A / 200A(for Inrush)
Resolution	16-bit
Accuracy	±0.5% of (Reading + Range) / ±2% of (Reading + Range) (for Inrush)
ACW meter	0.6W / 6W / 60W / 600W / 6000W
Resolution	32-bit
Accuracy	±0.5% of (Reading + Range)
DCV meter	40V / 400V
Resolution	0.001V / 0.01V
Accuracy	±0.5% of (Reading + Range)
DCA meter	20mA / 200mA / 2A / 20A / 200A(for Inrush)
Resolution	0.001mA / 0.01mA / 0.1mA / 1mA / 10mA(for Inrush)
Accuracy	±0.5% of (Reading + Range) / ±2% of (Reading + Range) (for Inrush)
DCW meter	800mW / 8W / 80W / 800W / 8000W
Resolution	32-bit
Accuracy	±0.5% of (Reading + Range)
PF meter	±0.01~1.00
Resolution	0.01
Accuracy	Corresponds to V and A, 1% of (Reading + Range)
Frequency meter	40~70 Hz
Resolution	0.1 Hz
Accuracy	± 0.1 Hz
Inrush Delay/Period	0~99.9mS/0.1~99.9S
Meter Meas. Rate Interval time	100mS / 200mS / 500mS / 1S / 5S / 10S
Low Pass Filter(V & A)	50KHz
Interface	RS-232



## 4015A Power Meter with Harmonic 規格簡表及可測試項目列表

Model		4015A-1 Power Meter		
No. of Input Channel		1		
適用測試功能				
1. Current Harmonic		4. 輸入功率 Input Power		
2. 輸入有效值電流 Input RMS Current		5. 無載功率 No Load Power Consumption		
3. 輸入頻率 Input Frequency		6. 輸入功率因素 Input Power Factor		
規格				
ACV meter (Vrms)	Range	15V / 0.001V, 30V / 0.001V, 50V / 0.01V 150V / 0.01V, 300V / 0.01V, 500V / 0.1V		
	Accuracy	±0.1% of (Reading + Range)		
ACA meter (Arms)	Range	20mA / 0.001mA, 500mA / 0.01mA, 10A / 1mA 50mA / 0.001mA, 2A / 0.1mA, 20A / 1mA 200mA / 0.01mA, 5A / 0.1mA, 200A peak / 0.01A		
	Accuracy	±0.1% of (Reading + Range) ±2% of (Reading + Range, for Inrush)		
ACW meter	Range	0.3W / 0.01mW	0.6W / 0.01mW	1W / 0.1mW
		0.75W / 0.1mW	1.5W / 0.1mW	2.5W / 0.1mW
	Accuracy	±0.1% 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 meter	Range	±0.001~1.000 / 0.001		
	Accuracy	1% of (Reading + Range, Corresponds to V and A)		
Frequency meter	Range	40~70 / 0.1Hz		
	Accuracy	± 0.1 Hz		
V/A	Number	1~50 th / Same as ACV, ACA meter		
Harmonic	Accuracy	±0.5% of (Reading + Range)		
V/A THD	Range	0%~255% / 0.001%		
	Accuracy	±0.5% of (Reading + Range)		
Inrush Delay / Period		0~100ms		
Low Pass Filter(V & A)		50KHz		
Interface		RS-232		

## 5303 AVR 規格簡表及可測試項目列表

Model	5303 AVR
適用測試功能	
1. Input Inrush Current	
規格	
Power Rating	3KVA
Maximum Capacity	CF > 7
Input Voltage Rating	230Vrms +/- 10%
Output Voltage Rating	230,264,277Vrms Selectable
Accuracy	±2.5Vrms
Interface	RS-232 remote control only

## 5061-1 OVP Source 規格簡表及可測試項目列表

Model	5060-1 OVP Source
適用測試功能	
1. 過電壓保護 Over Voltage Protection	
規格	
Power Rating	80W <sup>*1</sup>
Voltage range	0~20V / 40V
Resolution	0.001V
Current range	0~4A / 2A
Resolution	0.1mA
Ton Step time	0~6.5 Sec.
Resolution	0.1 mSec.
Slew rate	0.02V / uS
Protection	OCP, OTP

\*1 The maximum power apply for 1 Sec. at 50% duty cycle.

### 訂購方式



基本版

6010-01-A

單組Charger/Adapter/LED Driver  
自動測試系統



標準版

6010-01-B

單組Charger/Adapter/LED Driver  
自動測試系統



加值版

6010-01-C

單組Charger/Adapter/LED Driver  
自動測試系統



完整版

6010-01-D

單組Charger/Adapter/LED Driver  
自動測試系統