

6010-4

(33401G)

4 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

- 可同時測試4組待測物，以提高測試效率並節省測試時間及成本
- 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	PFR-100M D.C. Power Supply	5303 AVR	60104 Mainframe
輸出特性測試 Output Performances								
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	✓	✓						✓
輸入特性測試 Input Characteristics								
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	✓	✓						✓
調變測試 Regulation Tests								
電源調變 Line Regulation	✓	✓						✓
負載調變 Load Regulation	✓	✓						✓
組合調變 Combine Regulation	✓	✓						✓
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	✓	✓	✓					✓
保護特性測試 Protection Tests								
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	✓	✓						✓
Others								
TTL 控制訊號 (TTLControl)	✓	✓	✓					✓
繼電器控制 (Relay Control)	✓	✓	✓					✓

6010-04 Charger/Adapter/LED Driver 4組 測試系統設備快選表

測 試 項 目	儀 器 設 備			
	6010-04-A 基本版	6010-04-B 標準版	6010-04-C 加值版	6010-04-D 完整版
輸出特性測試 Output Performances				
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	☒			
輸入特性測試 Input Characteristics				
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	☒			
調變測試 Regulation Tests				
電源調變 Line Regulation	☒			
負載調變 Load Regulation	☒			
組合調變 Combine Regulation	☒			
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		☒		
保護特性測試 Protection Tests				
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	☒			
Others				
TTL 控制訊號 (TTLControl)		☒		
繼電器控制 (Relay Control)		☒		

6010-04-A Charger/Adapter/LED Driver 4組基本版測試系統架構組成如表所示只需APS-7000 series AC Power Sources, 4013A 4 Channel Power Meter and Dual Channel Load (33401F/G 系列) 即可，組成圖示如下

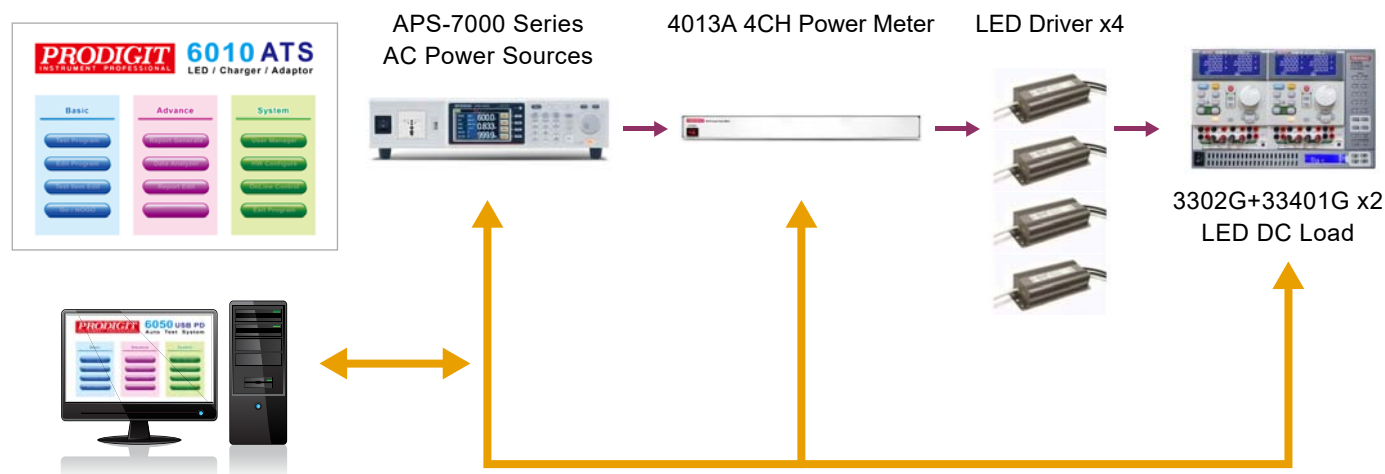


→ 3305G + 33401Gx2 LED DC Load

→ 4013A 4 CH Power Meter

→ APS-7000 series AC Power Sources

6010-04-A 基本版4組測試系統方塊圖



6010-04-A 基本版4組測試系統可測試項目如下表

輸出特性測試 Output Performances	輸入特性測試 Input Characteristics
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
效率 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 Regulation Tests	保護特性測試 Protection Tests
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

6010-04-A 基本版4組測試系統設備配備表

Equipment Model No.		Qt'y
APS-7000 Series Programmable Linear AC Power Sources		1
33401G Series 150W x 2 LED DC Load Module		2
3305G 2 CH Mainframe		1
4013A 4 Chennel Power Meter		1
6010-04 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	
o Choose this interface When the System device use Note Book		

OS : Windows 7.0 or later

6010-04-B 標準版 4組測試系統由基本版增加 4032 Noise & Timing Analyzer 增加時序與漣波雜訊測試，組成圖如下。

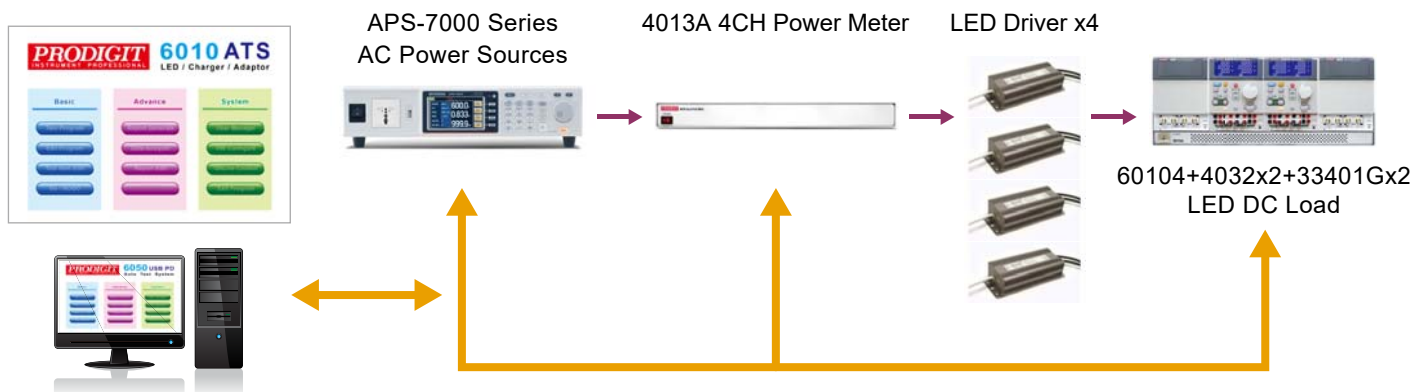


→ 60104 + 4032x2 + 33401Gx2
LED DC Load

→ 4013A 4 CH Power Meter

→ APS-7000 series AC Power Sources

6010-04-B 標準版4組測試系統方塊圖



6010-04-B 標準版4組測試系統增加測試項目如下表

輸出特性測試 Output Performances	時序與暫態特性測試 Timing & Transient
漣波電壓 Ripple Voltage	開機時間 Turn ON (Set-Up) Time
其他 Others	關機時間 Turn OFF (Hold-Up) Time
TTL 控制訊號 (TTLControl)	上升時間 Rise Time
繼電器控制 (Relay Control)	下降時間 Fall Time

6010-04-B 標準版4組測試系統設備配備表

Equipment Model No.	Qt'y
APS-7000 Series Programmable Linear AC Power Sources	1
33401G Series 150W x2 LED DC Load Module	2
60104 4 CH Mainframe	1
4032 Dual Timing & Noise	1
4013A 4 Channel Power Meter	1
6010-04 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

6010-04-C 加值版 4組測試系統由標準版更改 4013A 為4015A Power Meter with Harmonic
增加電流諧波 Harmonic 量測，組成圖示如下

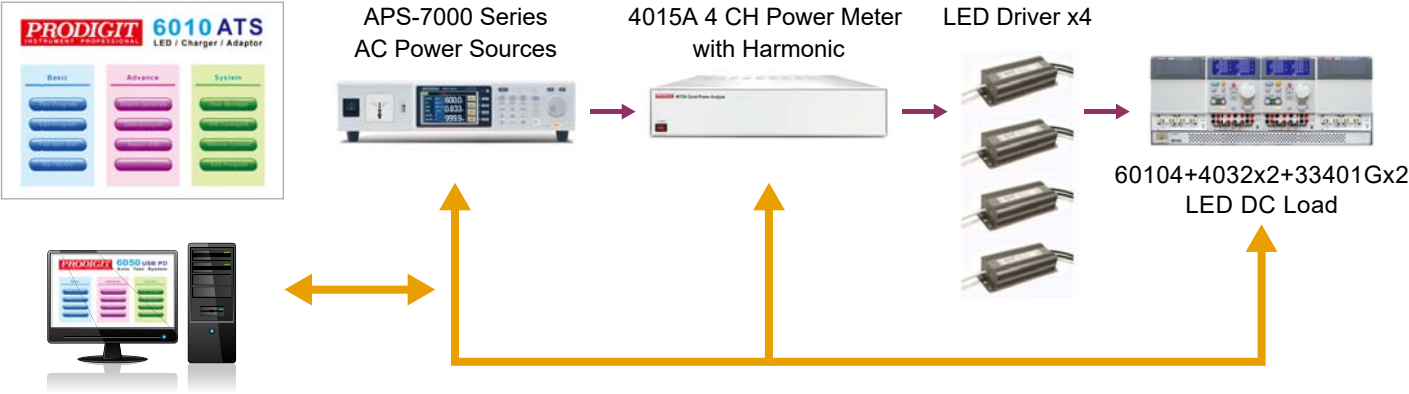


→ 60104 + 4032x2 + 33401Gx2
LED DC Load

→ 4015A 4 CH Power Meter with Harmonic

→ APS-7000 series AC Power Sources

6010-04-C 加值版4組測試系統方塊圖



6010-04-C 加值版4組測試系統增加測試項目如下表

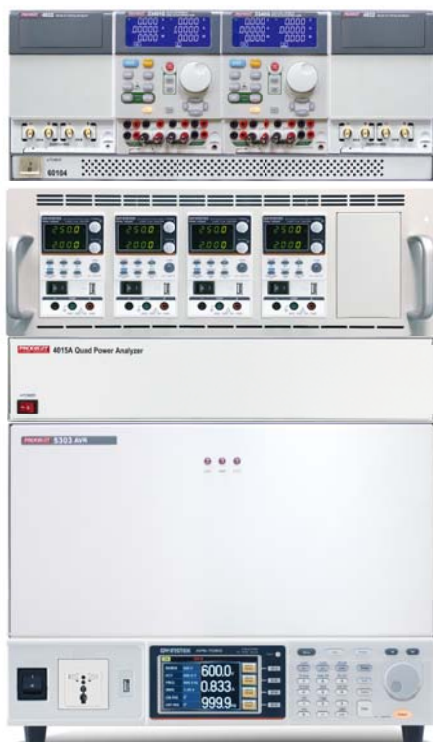
輸入特性測試 Input Characteristics
總諧波失真 Total Harmonic Distotion

6010-04-C 加值版4組測試系統設備配置表

Equipment Model No.		Qt'y
APS-7000 Series Programmable Linear AC Power Sources		1
33401G Series 150W x2 LED DC Load Module		2
60104 4 CH Mainframe		1
4032 Dual Timing & Noise		1
4015A 4 CH Power Meter with Harmonic		1
6010-04 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

6010-04-D 完整版 4組測試系統由加值版增加 PFR-100M D.C. Power Supply 及 5303 Inrush Source , 增加過電壓保護及輸入湧浪電流保護測試 , 組成圖示如下



→ 60104 + 4032x2 + 33401Gx2
LED DC Load

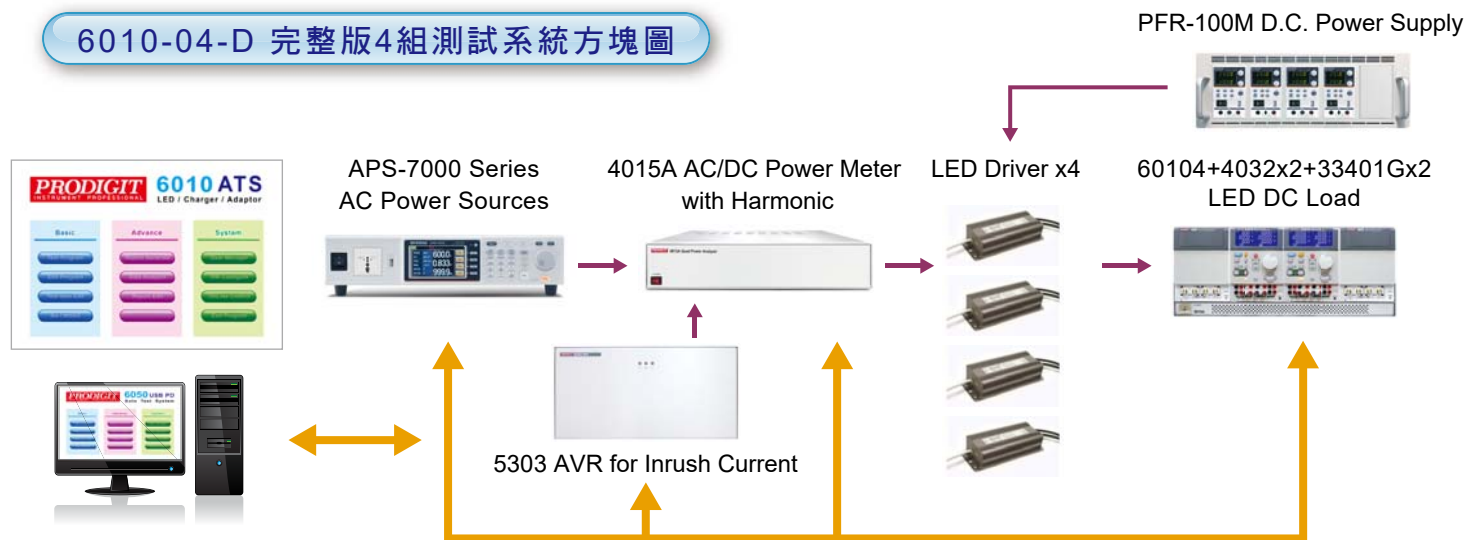
→ PFR-100M Multi-Range D.C. Power Supply

→ 4015A 4 CH Power Meter with Harmonic

→ 5303 AVR for Inrush Current

→ APS-7000 series AC Power Sources

6010-04-D 完整版4組測試系統方塊圖



6010-04-D 完整版4組測試系統增加測試項目如下表

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

6010-04-D 完整版4組測試系統設備配置表

Equipment Model No.		Qt'y
APS-7000 Series Programmable Linear AC Power Sources		1
33401G Series 150W x2 LED DC Load Module		2
60104 4 CH Mainframe		1
4032 Dual Timing & Noise		2
4015A 4 CH Power Meter with Harmonic		1
PFR-100M Multi-Range D.C. Power Supply		4
5303 Inrush Sorce		1
6010-04 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	
o Choose this interface When the System device use Note Book		

OS : Windows 7.0 or later

各儀器設備功能與規格

APS-7000 Series Programmable Linear AC Power Sources規格簡表及可適用之功能列表

Model		APS-7000 Series Programmable Linear AC Power Sources			
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)		APS-7050	APS-7100	APS-7200	APS-7300
Power Rating		500VA	1000VA	2000VA	3000VA
Voltage Rating		0 ~ 155Vrms, 0 ~ 310Vrms			
Current Rating	0~155Vrms	4.2A	8.4A	16.8A	25.2A
	0~310Vrms	2.1A	4.2A	8.4A	12.6A
Frequency		45 ~ 500 Hz			
Angle (ON/OFF)		0 ~ 359°			
PQT<IEC 61000-4-11>		DIP, Interrupt, Variation			
MEASUREMENT					
ACV meter (Vrms)		0 ~ 155Vrms, 0 ~ 310Vrms, Auto			
Voltage (RMS)	Range	0.20~38.75Vrms;38.76~77.50Vrms;77.51~155.0Vrms;155.1~310.0Vrms			
	Resolution	0.01V at 0.00 ~ 99.99Vrms; 0.1V at 100.0 ~ 310.0Vrms			
	Accuracy *4	±(0.5% of reading + 2 counts)			
Frequency	Range	45 ~ 500Hz			
	Resolution	0.01Hz at 45Hz~99.99Hz ; 0.1Hz at 100Hz~500.0Hz			
	Accuracy	±0.1Hz			
Current (RMS)	Range	2.00 ~ 70.00mA ; 60.0 ~ 350.0mA ; 0.300 ~ 3.500A ; 3.00 ~ 17.5A		0.200 ~ 3.500A ; 3.00 ~ 35.00A	
	Resolution	0.01mA, 0.1mA, 0.001A, 0.01A		0.001A ; 0.01A	
	Accuracy	± (0.6% of reading+5 counts), 2.00~350.0mA ; ± (0.5% of reading+5 counts), 0.300~3.500A ; ± (0.5% of reading+3 counts),3.000~17.50A		± (0.5% of reading + 5 counts) , 0.200 ~ 3.500A ± (0.5% of reading + 3 counts) , 3.00 ~ 35.00A	
Current (Peak)	Range	0.0 ~ 70.0A		0.0 ~ 140.0A	
	Resolution	0.1A			
	Accuracy	± (1% of reading + 1 count)			
Power (W)	Resolution	0.01W, 0.1W, 1W		0.1W, 1W	
	Accuracy	± (0.6% of reading+5 counts), 0.20~99.99W ; ± (0.6% of reading+5 counts), 100.0~999.9W ; ± (0.6% of reading+2 counts), 1000~9999W		± (0.6% of reading + 5counts) , 0.2 ~ 999.9W ± (0.6% of reading + 2counts) , 1000 ~ 9999W	
Apparent (VA)	Resolution	0.01VA, 0.1VA, 1VA		0.1VA, 1VA	
	Accuracy	±(1% of reading+7 counts), 0.20~99.99VA ; ±(1% of reading+7 counts), 100.0~999.9V A ; ±(1% of reading+5 counts), 1000~9999VA		± (1% of reading + 7 counts) , 0.2 ~ 999.9VA ; ± (1% of reading + 5 counts) , 1000 ~ 9999VA	
Power Factor	Resolution	0.001			
	Accuracy	± (2% of reading + 2 counts)			
Frequency meter		45 ~ 500Hz			
Interface		RS-232			

Table 1 - Preferred test level and durations for voltage dips

Class ^a	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 ^c cycles		
Class 3	0 % during 1/2 cycle	0 % during 1 cycle	40 % during 10/12 ^c cycles	70 % during 25/30 ^c cycles	80 % during 250/300 ^c cycles
Class X ^b	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 ^a	Class ^a 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 ^c cycles
Class 3	0 % during 250/300 ^c cycles
Class X ^b	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 (td)	Time at reduced voltage (ts)	Time for increasing voltage (ti) (50 Hz/60 Hz)
70%	Abrupt	1 cycle	25/30 ^b cycles
X ^a	X ^a	X ^a	X ^a

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".

3310G Series DC E-Load 規格簡表及可測試項目列表

Model	3310G Series DC E-Load	
適用測試功能		
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
規格		
Power	75W, 150W, 300W	
Current	15A, 30A, 60A	
Voltage	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	
適用測試功能		
1. 輸出電壓 Output Voltage	4. 效率 Efficiency	7. 過電流保護 OC Protection
2. 輸出電流 Output Current	5. 平均效率 Average Efficiency	8. 過功率保護 OP Protection
3. 動態負載 Dynamic Load	6. 短路保護 Short Circuit	9. 調光測試 DIM Test
規格		
Channel	1	2
Power	300W	150W x 2
Current	12A, 24A	6A x 2
Voltage	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	
適用測試功能			
1. 漣波電壓 Ripple Voltage		4. 上升時間 Rise Time	
2. 開機時間 Turn ON(Set-Up) Time		5. 下降時間 Fall Time	
3. 關機時間 Turn OFF(Hold-Up) Time			
規格 (Specifications)			
No. of input channel		1	
Timing Measurement		Ripple Measurement	
Set-up / Hold-up / Rise / Fall Time		Band Width	0 ~ 100 KHz
Voltage range	0 ~ 80 / 600 Vdc	Voltage range	0 ~ 80 / 600 Vdc
Current range	*(1/4F.S.) / (F.S.) Adc	Measurement range	0 ~ 3.2 / 20 Vp-p
Timing range	1 Sec/2 Sec/4 Sec/8 Sec/16 Sec	Resolution	0.001/0.01V
Resolution	1 uS/2uS/4uS/8uS/16uS	Current range	*(1/4F.S.) / (F.S.) Adc
Vth1 / Vth2		Measurement range	*(1/8F.S.) / (1/2F.S.) Ap-p
Voltage range	5% ~ 95% of reading	Resolution	0.001 / 0.01A
Resolution	0.01 V / 0.01V, 0.001A/0.01A	Accuracy	±5% of (Reading + Range)
Accuracy	±2% of (Reading + Range)	Sampling Rate	100KHz
Noise Measurement		Update Rate	50~1000 mS
Low Pass Filter	up to 20 MHz	Resolution	1mS
Voltage range	0.6 / 3Vp-p	Dimming Measurement	
Resolution	1mV	Band Width	100KHz
Accuracy	±2% OF reading + 5mV	Current range	*(1/8F.S.) / (1/2F.S.) Adc
Over Shoot Measurement		Resolution	0.001 / 0.01A
Band Width	0 ~ 100 KHz	Accuracy	±5% of (Reading + Range)
Voltage range	0~80 / 600Vdc	Sampling Rate	100KHz
Measurement range	0 ~ 80 / 600 Vdc	Update Rate	50~1000 mS
Resolution	0.01 / 0.1Vdc	Resolution	1mS
Current range	*(1/4F.S.) / (F.S.) Adc	Frequency range	10Hz~35KHz
Measurement range	*(1/4F.S.) / (F.S.) Adc	Resolution	1Hz
Resolution	0.001 / 0.01A	Accuracy	±1% of (Reading + Range)
Accuracy	±5% of (Reading + Range)	Duty(Ton) Range	3uS~90mS
Sampling Rate	100KHz	Resolution	1uS
Update Rate	50~1000 mS	Accuracy	±1% of (Reading + Range)
Resolution	1mS		

4032 Noise & Ripple Meter 規格簡表及可測試項目列表

Model	4032-PD Noise & Timing Analyzer Module		
適用測試功能			
1. 漣波電壓 Ripple Voltage		4. 上升時間 Rise Time	
2. 開機時間 Turn ON(Set-Up) Time		5. 下降時間 Fall Time	
3. 關機時間 Turn OFF(Hold-Up) Time			
規格 (Specifications)			
No. of input channel		2	
Timing Measurement		Ripple Measurement	
Set-up / Hold-up / Rise / Fall Time		Band Width	0 ~ 100 KHz
Voltage range	0 ~ 80 / 600 Vdc	Voltage range	0 ~ 80 / 600 Vdc
Current range	0~0.8/3.2Adc	Measurement range	0 ~ 3.2 / 24 Vp-p
Timing range	0~1 Sec	Resolution	0.001 / 0.01V
Resolution	10uS	Current range	0 ~ 0.8 / 3.2 Adc
Vth1 / Vth2		Measurement range	0 ~ 0.4 / 1.6 Ap-p
Voltage range	5% ~ 95% of reading	Resolution	0.001 / 0.01A
Resolution	0.1 V/1V, 0.001A/0.01A	Accuracy	±5% of (Reading + Range)
Accuracy	±2% of (Reading + Range)	Sampling Rate	100KHz
Noise Measurement		Update Rate	50~1000 mS
Low Pass Filter	up to 20 MHz	Resolution	1mS
Voltage range	0.6 / 3Vp-p	Dimming Measurement	
Resolution	1mV	Band Width	100KHz
Accuracy	±2% OF reading + 5mV	Current range	0 ~ 0.8 / 3.2 Adc
Over Shoot Measurement		Resolution	0.001 / 0.01A
Band Width	0 ~ 100 KHz	Accuracy	±5% of (Reading + Range)
Voltage range	0 ~ 80 / 600 Vdc	Sampling Rate	100KHz
Measurement range	0 ~ 80 / 600 Vdc	Update Rate	50~1000 mS
Resolution	0.1 / 1Vdc	Resolution	1mS
Current range	0 ~ 0.8 / 3.2 Adc	Frequency range	10Hz~35KHz
Measurement range	0 ~ 0.8 / 3.2 Adc	Resolution	1Hz
Resolution	0.001 / 0.01A	Accuracy	±1% of (Reading + Range)
Accuracy	±5% OF (Reading + Range)	Duty(Ton) Range	3uS~90mS
Sampling Rate	100KHz	Resolution	1uS
Update Rate	50~1000 mS(1/Fs * 20000)	Accuracy	±1% of (Reading + Range)
Resolution	1mS		

Note : F.S. Load Current range

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	$\pm 0.5\%$ of (Reading + Range)
ACA meter(Arms)	20mA / 200mA / 2A / 20A / 200A(for Inrush)
Resolution	16-bit
Accuracy	$\pm 0.5\%$ of (Reading + Range) / $\pm 2\%$ of (Reading + Range) (for Inrush)
ACW meter	0.6W / 6W / 60W / 600W / 6000W
Resolution	32-bit
Accuracy	$\pm 0.5\%$ of (Reading + Range)
DCV meter	40V / 400V
Resolution	0.001V / 0.01V
Accuracy	$\pm 0.5\%$ of (Reading + Range)
DCA meter	20mA / 200mA / 2A / 20A / 200A(for Inrush)
Resolution	0.001mA / 0.01mA / 0.1mA / 1mA / 10mA(for Inrush)
Accuracy	$\pm 0.5\%$ of (Reading + Range) / $\pm 2\%$ of (Reading + Range) (for Inrush)
DCW meter	800mW / 8W / 80W / 800W / 8000W
Resolution	32-bit
Accuracy	$\pm 0.5\%$ of (Reading + Range)
PF meter	$\pm 0.01 \sim 1.00$
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		
		±0.1% of (Reading + Range)		
	Accuracy	±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
		3W / 0.1mW	6W / 0.1mW	10W / 1mW
		7.5W / 1mW	15W / 1mW	25W / 1mW
		30W / 1mW	60W / 1mW	100W / 10mW
		75W / 1mW	150W / 10mW	250W / 10mW
		150W / 10mW	300W / 10mW	500W / 10mW
		300W / 10mW	600W / 10mW	1000W / 0.1W
		3W / 0.1mW	6W / 0.1mW	10W / 1mW
		7.5W / 1mW	15W / 1mW	25W / 1mW
		30W / 1mW	60W / 1mW	100W / 10mW
		75W / 10mW	150W / 10mW	250W / 10mW
		300W / 10mW	600W / 10mW	1000W / 0.1W
		750W / 10mW	1500W / 0.1W	2500W / 0.1W
		1500W / 0.1W	3000W / 0.1W	5000W / 0.1W
		3000W / 0.1W	6000W / 0.1W	10000W / 1W
	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 規格簡表敘述及可適用之功能列表

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

PFR-100L/100M 規格表及可適用之功能列表

Model		Fanless Multi-Range D.C. Power Supply	
適用測試功能			
1. 過電壓保護 Over Voltage Protection			
規格		PFR-100L	PFR-100M
Power Rating		100W	
Voltage range		0 ~ 50V	0 ~ 250V
Resolution		40mV	200mV
Current range		0 ~ 10A	0 ~ 2A
Resolution		1mA	0.1mA
Slew rate	Rise Time	50ms	100ms
	Fall Time	100ms	200ms
Protection		OCP , OTP	

訂 購 方 式



基本版

6010-04-A (33401G)
4組Charger/Adapter/LED Driver
自動測試系統



標準版

6010-04-B (33401G)
4組Charger/Adapter/LED Driver
自動測試系統



加 值 版

6010-04-C (33401G)
4組Charger/Adapter/LED Driver
自動測試系統



完整版

6010-04-D (33401G)
4組Charger/Adapter/LED Driver
自動測試系統