

#### Manufacturers Of Power & Automotive Equipment

Voltage Reducers | Reversing Alarms | Battery Isolators | Power Supplies | Power Inverters Brake Contollers | Battery Chargers | Light Inverters | Fluorescent Lamps | Solar Regulators www.gsl.com.au

#### **GSL Electronics**

#### 240V Battery Chargers (P.4 - P.11)

- Page 4 240VAC to 12VDC 1.7A / 3.5A / 6A Linear Battery Chargers
- Page 5 240VAC to 12VDC 10 Amp Battery Charger
- Page 6 4 Stage Dual Chemistry 12VDC 30Amp Battery Charger
- Page 7 4 Stage Dual Chemistry 24VDC 18Amp Battery Charger
- Page 8 240V To 48VDC at 10A Battery Charger
- Page 9 240V To 12/24 VDC at 20/10A Battery Charger Auto Select
- Page 10 240V To 12V at 5A / 15A / 30A Lead Acid Battery Charger
- Page 11 12V 30A Fixed Connection Multi-Chemistry Battery Charger

#### 24V-12V Battery Chargers (P.12 - P.13)

- Page 12 24V To 12VDC at 40A / 60A Switchmode Battery Charger
- Page 13 24V To 12VDC at 10A / 20A / 30A Switchmode Battery Chargers

#### 12V-24V Battery Chargers (P.14)

Page 14 - 12V To 24VDC Switchmode Battery Charger

#### 12V-12V Booster Chargers (P.15)

Page 15 - 12V Multi Chemistry Booster Charger

#### Solar Regulators (P.16 - P.19)

- Page 16- 200W Solar Battery Chargers Maximum Power Point Trackers
- Page 17 1800W Solar Battery Chargers Maximum Power Point Trackers
- Page 18 3600W Solar Battery Chargers Maximum Power Point Trackers
- Page 19 Monitor And Control Module

#### **Voltage Doublers (P.20)**

Page 20 - 12V To 24VDC Single/Multi-Circuit Voltage Doublers

#### Linear Voltage Reducer (P.21 - P.23)

- Page 21 12V To 24VDC Multi-Circuit Voltage Reducers
- Page 22 24V To 12VDC Multi-Circuit Lighting Reducers 4 Circuits
- Page 23 24V To 12VDC Single Circuit Linear Voltage Reducers "Keylink Series"

#### Switchmode Voltage Reducer (P.24 - P.26)

- Page 24 Compact 7A 24V To 12VDC Switchmode Voltage Reducers
- Page 25 24V To 12VDC Single Circuit Switchmode Voltage Reducers
- Page 26 24V To 12VDC 40A / 60A Switchmode Voltage Reducers

#### **Battery Equalizers (P.27)**

Page 27 - 24V To 12VDC 40A / 60A Switchmode Battery Equalizer

#### **Product Listing**

#### Pure/Modified Sinewave Inverters (P.28 - P.29)

Page 28 - DC To AC - Modified Sinewave Power Inverters

Page 29 - DC To AC - Pure Sinewave Power Inverters

#### Fluorescent Lighting Products (P.30 - P.32)

Page 30 - Fluorescent Lamp Low Voltage Inverters For T8 Tubes

Page 31 - Fluorescent Lamp Low Voltage Inverters For T5 Tubes

Page 32 - Low Voltage Fluorescent Interior Light "FLC Series" For T5 Tubes

#### Brake Controllers & Reversing Buzzers (P.33 - P.36)

Page 33 - 12 Volt Trailer Electric Brake Control

Page 34 - Advanced Micro-Controlled Electronic Brake Controller

Page 35 - 12V and 24V Remote Brake Controllers

Page 36 - 12/24 VDC Dual Voltage Reverse Buzzer

#### **Timed Flashing Modules (P.37)**

Page 37 - WIG - WAG Flashing Modules / Timed Flasher Modules

#### **Electronic Battery Isolator (P.38)**

Page 38 - Electronic 100/150 Amp Battery Isolator

#### Low Battery Moniters/Disconnects (P.39 - P.41)

Page 39 - Micro-Controlled 12V / 24V 50 Amps Low Voltage Disconnects

Page 40 - Micro-Controlled 12V 20 Amps Low Voltage Disconnects

Page 41 - Low Battery Monitors and Disconnects

#### **Battery Isolators (P.42 - P.43)**

Page 42 - Intelligent Solenoid Battery Isolator

Page 43 - Battery Isolator Installation Kit

#### Uninterruptible Power Supply (P.44)

Page 44 - 12 Volt Uninterruptable Power Supply "Powermaster Series"

#### Regulated Power Supply (P.45)

Page 45 - 240VAC to 12VDC Linear Regulated Power Supply | 240VAC to 12VDC Fully Regulated Power Supply

#### Water Level Indicator (P.46 - P.47)

Page 46 - 12VDC and 24VDC Water Level Indicators

Page 47 - Water Level Indicators Installation Kits

#### ABS Plastic / Alloy Housings (P.48)

Page 48- ABS Plastic / Alloy Housings c/w Mounting Lugs



## **240VAC to 12VDC**LINEAR BATTERY CHARGERS

#### **Features:**

- · High efficiency switch mode technology
- · Current limiting prevents overload
- · Compact and lightweight anodized aluminium heatsink construction
- · Automatic two stage charger designed to charge 12V lead acid batteries
- Three LED lights to indicate charging mode
- · Unit cooling via in built fan





Specifications	BC240-1200	BC240-1201	BC240-1202
Output Current (max.)	1.7A@12.8V DC	3.5A@12.7V DC	6A@12.8V DC
AC Current	0.3A	0.5A	1.3A
Dimensions (mm) ( LxWxH )	130 x 95 x 50	115 x 152 x 75	115 x 232 x 75
Weight	1 Kg	1.6 Kg	3.1 Kg
AC Input Voltage	240V AC	240V AC	240V AC
AC Frequency	45-65 Hz	45-65 Hz	45-65 Hz
DC Output Voltage	14.0V DC	14.0V DC	14.0V DC
Efficiency (approx.)	65%	65%	65%
Construction	Plastic Wallmount	Aluminium Housing	Aluminium Housing
Indicators	AC	Power, Boost, Float	
Protection	Overload (Via Fuse) Short Circuit (Via Fuse) Reverse Polarity (Via Fuse) Reverse Discharge		
Cooling	Natural Convention		
Connections - AC - DC		OVAC 10A mains plug ck Cable fitted with clip	os

Approvals. Safety Standard No. Q04724 C Tick No. N1408 (EMI/RFI) AS/ANZ 3350.1:2002 INCL. Amdt 1 AS/ANZ 3350.2.29:2001 AS/ANZ 2064 Group 1, Class B BC240-1200 Approval # Q060301



#### 240VAC to 12VDC @ 10 Amps BATTERY CHARGERS

#### Features:

- · Automatic 2 stage charger
- · Designated to charge 12V lead acid batteries
- · High reliability linear technology giving life operation
- Compact and rugged aluminium heat sink construction
- · Unit cooling via natural convection
- Led light indicators display charging mode and fuse status



Specifications	BC240-1210
AC Input Voltage	180 - 250V
Input Current	1.3A max
Floating Charge Voltage	14V
Output Current	10A
Switching Frequency KHz	60 KHz (Typical)
Efficiency	85%
Protection	Overload, Over Voltage, Short Circuit Reverse Polarity (External Fuse)
Indicators	AC Power, Boost and Float
Cooling	Fan Load Activated
Dimensions (mm) ( LxWxH )	233 x 115 x 70
Weight	1.3 Kg

#### **Approvals:**

Safety Standard No. N17018
C Tick No. N1408 (EMI/RFI)
AS/ANZ 60950 : 2000
AS/ANZ 2064 Group 1, Class A

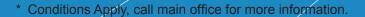


New High Performance
Award Winning 4 Stage Dual Chemistry
240VAC to 12VDC @ 30AMP
BATTERY CHARGER

- Innovative 4 stage fully automatic charger for optimal fast charging and extended battery life
- Award winning microprocessor design insures accurate voltage and current charging parameters
- Low ripple charge and completely operational from 180VAC to 250VAC
- · Compact heavy duty aluminium construction
- Fully protected against overload, over temperature and battery reversal
- No sparks connection
- Innovative voltage free leads with no power dissipation when disconnected
- Dual battery chemistry, selectable lead acid or calcium batteries
- · High output 30 amps
- Custom charge voltages between 10V and 16V available upon request\*



	Specifications	BC240-1230
	Normal voltage	12V
	Bulk Charge Current	30A
_	Dimensions[ LxHxW]	210 X 65 X 160 mm
	Float lead acid voltage	13.5V
	Bulk lead acid voltage	14.5V
	Float Calcium voltage	14.0V
	Bulk Calcium voltage	15.5V
	Saftey	AS/NZS 3350.2.29
		Current, Over Voltage, Reverse Polarity, ut,Voltage free leads without battery
	Weight	2.2 Kg
_	Standby consumption	Below 1W







**New High Performance Dual Chemistry** 240VAC to 24VDC @ 18AMP

#### **Features:**

- . Innovative 4 stage fully automatic charger for optimal fast charging and extended battery life
- Award winning microprocessor design insures accurate voltage and current charging parameters
- Low ripple charge and fully operational from 180VAC To 250VAC
- Compact heavy duty aluminium construction
- · Fully protected against overload, over temperature and battery reversal
- No sparks connection
- Innovative voltage free leads with no power dissipation when disconnected
- · Dual battery chemistry, selectable lead acid or calcium batteries
- · Custom charge voltages between 18V and 30V available upon request\*



7	Specifications	BC240-2418
_	Normal voltage	24V
ı	Bulk Charge Current	18A
Ī	Dimensions[ LxHxW]	210 X 65 X 160 mm
ı	Float lead acid voltage	27.0V
ı	Bulk lead acid voltage	29.0V
	Float Calcium voltage	28.0V
ı	Bulk Calcium voltage	31.0V
ı	Saftey	AS/NZS 3350.2.29
	Protection	Over Temperature, Over Current, Over Voltage, Reverse Polarity, Bulk charge timeout,Voltage free leads without battery
ı	Weight	2.2 Kg
	Standby consumption	Below 1W



Conditions Apply, call main office for more information.



New High Performance
Award Winning 4 Stage Dual Chemistry
240VAC to 48VDC @ 10AMP
BATTERY CHARGER

- Innovative 4 stage fully automatic charger for optimal fast charging and extended battery life
- Award winning microprocessor design insures accurate voltage and current charging parameters
- Low ripple charge and fully operational from 180VAC To 250VAC
- Compact heavy duty aluminium construction
- Fully protected against overload, over temperature and battery reversal
- No spark connection
- Innovative voltage free leads with no power dissipation when disconnected
- Dual battery chemistry, selectable lead acid or calcium batteries
- Custom charge voltages between 32V and 62V available upon request\*



	Specifications	BC240-4810
	Normal voltage	48V
_	Bulk Charge Current	10A
	Dimensions[ LxHxW]	210 X 65 X 160 mm
	Float lead acid voltage	54V
	Bulk lead acid voltage	58V
	Float Calcium voltage	56V
	Bulk Calcium voltage	62V
	Safety	Designed to comply with AS/NZS 60950
	Protection	Over Temperature, Over Current, Over Voltage, Reverse Polarity, Bulk charge timeout, Voltage free leads without battery
	Weight	2.2 Kg
	Standby consumption	Below 1W





**New High Performance** 240VAC to 12/24VDC @ 20/10AMP

- Innovative 4 stage fully automatic charger for optimal fast charging and extended battery life
- Award winning microprocessor design insures accurate voltage and current charging parameters
- Low ripple charge and fully operational from 180VAC To 250VAC
- Compact heavy duty aluminium construction
- · Fully protected against overload, over temperature and battery reversal
- No spark connection
- · Innovative voltage free leads with no power dissipation when disconnected
- Automatically selects and charges 12V or 24V batteries
- · Compact and lightweight design



/	Specifications	BC240-12202410
	Normal voltage	Auto Select 12V
	Bulk Charge Current	5A / 15A / 30A
Ī	Dimensions[ LxHxW]	210 X 65 X 160 mm
	Float at 12V mode	13.5V
	Bulk at 12V mode	14.5V
ı	Safety	AS/NZS 3350.2.29
	Protection	Over Temperature, Over Current, Over Voltage, Reverse Polarity, Bulk charge timeout,Voltage free leads without battery
ı	Weight	1.8 Kg
H	Standby consumption	Below 1W





New High Performance Award Winning Design 240VAC To 12V @ 5A / 15A / 30A LEAD ACID BATTERY CHARGER

- Innovative 4 stage fully automatic charger for optimal fast charging and extended battery life
- Award winning microprocessor design insures accurate charging parameters with unique zero power consumption when not connected to the battery
- Low ripple charge and fully operational from 180VAC To 250VAC
- Compact heavy duty aluminium construction
- Fully protected against overload, over temperature and battery connection reversal
- · No sparks connection
- Innovative voltage free leads with no power dissipation when disconnected
- Selectable output current between 5 Amp, 15 Amp and 30 Amp
- Available in custom charge rates, Conditions Apply.



	Specifications	BC240-1230-S
_	Normal voltage	Auto Select 12V
	Bulk Charge Current	5A/ 15A / 30A
	Dimensions[ LxHxW]	210 X 65 X 160 mm
	Float at 12V mode	13.5V
	Bulk at 12V mode	14.5V
_	Safety	AS/NZS 3350.2.29
	Protection <sub>Ove</sub>	er Temperature, Over Current, Over Voltage, Reverse Polarity, Bulk charge timeout,Voltage free leads without battery
	Weight	1.8 Kg
	Standby consumption	Below 1W





# 12 Volt 30 Amp FIXED CONNECTION MULTI- CHEMISTRY Automatic Battery Charger

- Suitable for use on RV's and fixed connection vehicle applications
- No drain on battery when disconnected from AC power supply
- Innovative 4 stage fully automatic charger for optimal fast charging and extended battery life
- Award winning microprocessor design insures accurate voltage and current charging parameters
- Low ripple charge and completely operational from 180VAC to 250VAC
- · Compact heavy duty aluminium construction
- Fully protected against overload, and over temperature
- · No sparks c onnection
- Innovative voltage free leads with no power dissipation when disconnected
- Dual battery chemistry, selectable lead acid or calcium batteries
- High output 30 amps



Specifications	BCAC1230RV
Input Voltage NOMINAL	240 VAC
Input Current MAXIMUM	5 ARMS
Bulk Charge Output [VDC±1%] GEL / /	AGM 14.3V
Bulk Charge Output [VDC±1%] Floode	ed / CALCIUM 14.6V
Float Charge Output [VDC±1%] GEL / /	AGM 13.3V
Float Charge Output [VDC±1%] Floode	ed/ CALCIUM 13.5V
Max Output Current [ ADC±5%]	30ADC
Battery Voltage Required For Start-up	6V
Protections	Over Temperature, Over Current, Short Circuit, Over Voltage, Bulk Charge Time Out
Cooling	Via Fan, Load Activated
Efficiency (Typical)	Greater Than 85%
Stand By Drain On Battery	1mA
Weight	2.2 Kg
Dimensions [mm] (L x H x W)	250 x 65 x 160



New High Performance
24V To 12VDC
Available in 40A and 60A
SWITCHMODE BATTERY CHARGER

- · Microprocessor based, 3 stage fast charge
- · High efficiency switchmode technology
- · High reliability and longer battery life
- Control wire with delayed reaction to avoid cold cranking problems
- Battery detection avoids connection reversal and sparking problems
- Time out on bulk charge to avoid battery charge
- Current limiting under overload and short circuit conditions
- Compact and light weight aluminium heatsink construction



Specifications	REC-1240C	REC-1260C
Input Voltage	23 to 30VDC	23 to 30VDC
Output Voltage Absorption/Float	13.5V ± 1%	13.5V ± 1%
Output Voltage Bulk charge	14.5V ± 1%	14.5V ± 1%
Efficiency at typical operating conditions	≥ 85%	≥ 85%
Bulk charge current	40 Amps	60 Amps
Stand by Current	20mA	20mA
Short Circuit and Battery reversal Protection	Yes	Yes
Over Voltage Protection	Yes	Yes
Thermal Protection	Yes	Yes
Input and charge status indication	Yes	Yes
Output Connections	Fly Leads	Fly Leads
Dimensions L x W x H mm	285x175x65	285x175x65
Weight	2.5Kg	2.6Kg



# 24V TO 12VDC Switchmode BATTERY CHARGER

- . High efficiency switchmode technology
- Control wire via ignition
- . Automatic 2 stage charge
- . Current and Voltage limiting protection
- Compact and lightweight aluminium heatsink construction
- Output over voltage protection
- Applicable where there are high current drain loads e.g. winches, rear lift platforms



Specifications	BC2412-10	BC2412-20	BC2412-30
Input Voltage	20V to 28VDC	20V to 28VDC	20V to 28VDC
Output Voltage	$14V \pm 3\%$	$14V \pm 3\%$	14V ± 3%
Efficiency % @ Full Load	≥90%	≥90%	≥90%
Output Current	10 Amps	20 Amps	30 Amps
Stand By Current (Approx)	50mA	70mA	70mA
Short Circuit Protection	Yes	Yes	Yes
Input To Output Protection	Yes	Yes	Yes
Thermal Protection	No	Yes	Yes
Output Connections - 4 Fly Leads	Yes	Yes	Yes
Dimensions mm (L x W x H)	90 x 135 x 60	155 x 135 x 60	175 x 135 x 60
Weight	0.6Kg	1.2Kg	1.3Kg



# **12V TO 24VDC Switchmode BATTERY CHARGER**

- . High efficiency switchmode technology
- Control wire via ignition
- . Immediate charging at switch on
- · Automatic 2 stage charge
- Current limiting protection
- Diode protection to guard against incorrect wiring of input to output leads
- · Short circuit protection via fuse
- Compact and lightweight aluminium heatsink construction



	Specifications	BC1224-15
	Input Voltage	11V to 15VDC
	Output Voltage	28VDC
	Load Regulation	± 5%
	Output Current	15 Amps
	Stand By Current (Approx)	140mA
	Switching Frequency	25KHz
	Input Protection Via Fuse	40A
	Output Short Circuit Protection	No
-	Input To Output Protection	Yes
	Output Connections - 4 Fly Leads	Yes
	Dimensions mm (L x W x H)	220 x 135 x 60
	Weight	1.76Kg
/		



#### New High Performance 12V Multi Chemistry BOOSTER CHARGER

#### **Features:**

- Australian award winning microprocessor design ensures accurate voltage and current charging parameters from as low as 9.2V input
- Automatic 3 stage charging ensures optimal fast charge and extended battery life
- Low minimum input voltage compensates for voltage drop in long cable lengths between main and auxiliary battery
- Selectable chemistry switch enables accurate charge voltage for AGM/GEL/FLOODED batteries
- · Fan cooled light weight aluminium heat sink construction
- Short circuit protection
- · Over temperature protection
- Over current protected
- Reverse polarity protected
- No spark connection to auxiliary battery



"Best dual/auxiliary battery charging system on the market..."

Specifications	MCB-1225
Lowest Operating Voltage	9.2V
Maximum Operating Voltage	15V
Maximum Current at Bulk Charge	25A
Charge Voltage for Flooded Cell	14.6V
Charge Voltage for AGM	14.4V
Charge Voltage for GEL	14.2V
Float Voltage	13.5V
Dimensions cm (LxWxH)	17.5 x 13.5 x 6.3
Weight	1.4 Kg



#### New High Performance Low Cost 200W Solar Charger MAXIMUM POWER POINT TRACKER

#### "Increase Your Panel Output By Up To 30%..."

Increase your panel output by up to 30%, without paying more, with the revolutionary MPPT series using the technology that won GSL the prestigious "2008 EDN Innovation award". This innovative solar charger is extremely cost effective, efficient, compact and easy to use. Reliability is enhanced by a multilevel over temperature protection and a robust maximum power tracking algorithm.

#### **Features:**

#### **MPPT12-1: Lowest cost MPPT in the market:**

- Drop in replacement to standard regulators boosting output current by up to 30%
- Simple 3 wire "plug and play" connection
- Autoselect for 12V and 24V panels and batteries



#### **MPPT12-2: More features and flexibilty**

- Built in load switch configurable as a variable dawn to dusk or low voltage disconnect
- · Remote load control option and alarm
- · Surge, PV short and reverse current protection

Specifications	MPPT12-1	MPPT12-2
Input Voltage	15V to 55V	
Output Voltage	13.5V / 14.5V & 27V / 29V	13.5V / 14.5V & 27V / 29V or Prog. 2V - 50V
Efficiency Typical	97%	
Output Power	200W at 29V 150W at 14.5V	l .
Remote Control, Alarm and Programming	-	Yes
Dawn to Dusk or LVD	-	Yes
PV Short and Surge Protection	-	Yes
Thermal Protection	Yes	
Dimensions [LxWxH]	100mm x 75mm x 3	35mm



#### New High Performance Low Cost 1800W Solar Charger MAXIMUM POWER POINT TRACKER

Increase your panel output by up to 30% with the revolutionary GSL MPPT series using the technology that won us the prestigious "2008 EDN Innovation award". This innovative solar charger is extremely cost effective, efficient, compact and easy to use. Reliability is enhanced by a multilevel over temperature protection and a robust maximum power tracking algorithm.



#### **Features:**

#### MPPT30-1:

- Lowest cost MPPT in the market, drop in replacement to standard regulators boosting output current by up to 30%
- · Simple 3 wire "plug and play" connection
- Suitable for 12V to 48V panels and batteries

#### MPPT30-2:

- Additional features for the more advanced user such as dawn to dusk, low voltage disconnect, remote alarm and programming capability.
- Optional LCD display for voltage and charge status.
- Triple chemistry vented, GEL and AGM cells

"The most cost effective MPPT in the market..."

	Specifications	MPPT30-1	MPPT30-2
ı	Input Voltage	15V to	o 95V
l	Output Voltage	12V / 24V / 48V	12 V / 24V / 48V or Prog. 5V - 70V
ı	Efficiency Typical	96	%
	Output Power	1800	DW .
ı	Remote Control, Alarm and Programming	-	Yes
ı	Dawn to Dusk or LVD	-	Yes
ı	PV Short and Surge Protection	-	Yes
ı	Thermal Protection	Ye	S
	Dimensions [LxWxH mm]	175 x 17	77 x 67

- Available in custom charge rates. Conditions Apply.



#### New High Performance Low Cost 3600W Solar Charger MAXIMUM POWER POINT TRACKER

Increase your panel output by up to 30% with the revolutionary GSL MPPT series using the technology that won us the prestigious "2008 EDN Innovation award". This innovative solar charger is extremely cost effective, efficient, compact and easy to use. Reliability is enhanced by a multilevel over temperature protection and a robust maximum power tracking algorithm.



#### **Features:**

#### **MPPT60-1:**

- Lowest cost MPPT in the market, drop in replacement to standard regulators boosting output current by up to 30%
- · Simple 3 wire "plug and play" connection
- Suitable for 12V to 48V panels and batteries

#### **MPPT60-2:**

- Additional features for the more advanced user such as dawn to dusk, low voltage disconnect, remote alarm and programming capability.
- Optional LCD display for voltage and charge status.
- Triple chemistry vented, GEL and AGM cells

"The most cost effective MPPT in the market..."

_			/
_	Specifications	MPPT60-1	MPPT60-2
ı	Input Voltage	15V to	95V
_	Output Voltage	12V / 24V / 48V	12 V / 24V / 48V or Prog. 5V - 70V
	Efficiency Typical	96%	
	Output Power	3600\	W
	Remote Control, Alarm and Programming	-	Yes
ı	Dawn to Dusk or LVD	-	Yes
	PV Short and Surge Protection	-	Yes
ı	Thermal Protection	Yes	
	Dimensions [LxWxH mm]	280 x 177	7 x 67

- Available in custom charge rates. Conditions Apply.



New High Performance Low Cost Monitor and Control Module MAXIMUM POWER POINT TRACKERS

#### **Features:**

- · Simple to operate
- · Displays system parameters
- · Enables load control and voltage settings
- · Low cost
- · Compatible with GSL MPPT Series
- PC connectivity
- · Can be positioned up to 1m from MPPT
- Available Soon



#### **Display:**

- Battery voltage
- Battery current and amph
- Load current and amph
- PV Voltage
- Mppt temperature
- Low battery voltage alarm
- High temperature alarm

#### Display Type:

Dual line 32 character LCD

#### **Control:**

- Load connect / disconnect
- Output voltage programming
- · Alarm ( ot and lv) level setup

#### Connectivity:

- PC via USB
- PC GUI for all display and control
- MPPT via standard 9 pin connector



# 12V To 24VDC Voltage Doublers Single / Muli Circuit

#### Features:

- · High efficiency switchmode technology
- Longer life operation
- · Soft start via control wire
- Overload protection
- · Input to output protection
- Compact and lightweight aluminium heatsink construction
- Suitable for most automotive, marine and industrial applications



Specifications	VI1224-5	VI1224-10	VI1224-15*	VI1224-20*
Input Voltage DC	11V to 15V	11V to 15V	11V to 15V	11V to 15V
Output Voltage DC	26.5V	26.5V	27V	27V
Number Of Circuits	Single	Single	Single	Single
Stand-by Current	26mA	28mA	140mA	140mA
Full Load Current	5A	10A	15A	20A
Load Regulation (1)	±5%	± 5%	± 5%	± 5%
Input To Output Protection	Yes	Yes	Yes	Yes
Connection - Fly Leads	Yes	Yes	Yes	Yes
Dimensions mm (L x W x H)	90 x 135 x 60	90 x 135 x 60	155 x 135 x 60	155 x 135 x 60
Weight	0.7Kg	0.7Kg	1.3Kg	1.3Kg

Denotes Encapsulated

Note (1): With vehicle engine running.



## 12V To 24VDC Voltage Reducers Muli Circuit

- For use with incandescent and LED lighting only
- High efficiency giving cooler and longer life operation
- Compact and light weight aluminium heatsink construction
- · Units are encapsulated to reduce water intake
- Returns to normal when short circuit or overload is removed



Specifications							
Model	Circuits	Power Rating in Watts	Dimensions				
VR 6	4	Total 360W	90 x 135 x 40				
VR 9	4	Total 480W	130 x 135 x 40				
VR 12 *	5	3 x 240W + 2 x 480W	290 x 135 x 60				
VR 13 *	5	2 x 240W + 3 x 120W	290 x 135 x 60				
VR 9-5C	5	Total 480W	130 x 135 x 40				
VR 9-5C	5	Total 480W	130 x 135 x 40				

<sup>\*</sup> Denotes Encapsulated



# 24V To 12VDC Multi Circuit Lighting Reducers 4 CIRCUITS

#### **Features:**

Multi circuit reducers are designed specifically for applications with incandescent & LED lighting for caravans, box trailers and other automotive vehicles. When choosing which model to use: determine the load required to be carried by each circuit as accurately as possible. Choose the model which has a capacity of 10-15% above the estimated current needed to allow for wiring resistance in trailers. The MCR 120 and MCR 240 series are designed for caravans, box trailers and other small trailers where the length of cable does not exceed 6m.

#### **MCR 120**

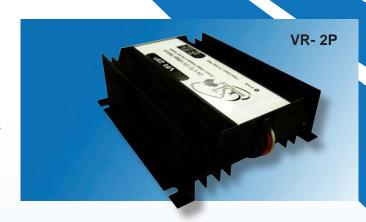


Model	Circuits	Power Rating (Watts)	Waterproofing	Dimensions (LxWxH)
MCR 120	4	120W	Encapsulated	73x92x31.5
MCR 240	4	240W	Encapsulated	73x92x31.5



24V To 12VDC Single Circuit LINEAR VOLTAGE REDUCERS "Keylink Series"

- The units are designed to operate efficiently for loads up to the output rating
- Output fail safe protection to guard communication and electronic equipment against over voltage
- Current limiting under overload, short circuit condition.
   The unit will respond to overload and short circuit conditions by folding back the output voltage.
- . Ideal for communication equipment



Specifications	VS200	VR 1P	VR 2P	VR 3P	VR 4P
Input Voltage	20 to 30VDC	20 to 30VDC	20 to 30VDC	20 to 30VDC	20 to 30VDC
Output Voltage	13.5V ± 5%	$13.5V \pm 5\%$	$13.5V \pm 5\%$	13.5V ± 5%	13.5V ± 5%
Output Current	3 Amps	4 Amps	7 Amps	10 Amps	14 Amps
Output current peak rating	3 Amps	6 Amps	10 Amps	15 Amps	20 Amps
Short Circuit Protection	No	No	No	No	No
Input to Output Protection	Yes	Yes	Yes	Yes	Yes
Earth Loss Protection	Yes	Yes	Yes	Yes	Yes
Current Limit	Yes	Yes	Yes	Yes	Yes
Over voltage Protection	Yes	Yes	Yes	Yes	Yes
Connections - fly leads	Yes	Yes	Yes	Yes	Yes
Dimensions L x W x H mm	130x90x40	130x136x47	155x136x47	220x136x47	290x136x47
Weight	0.32Kg	0.5Kg	0.58Kg	0.8Kg	1Kg



# Compact 7A, 24V To 12VDC Switchmode Voltage Reducer

- · High efficiency switchmode technology
- · High reliability and low noise design
- . Input and output status indicators
- Current limiting under overload and short circuit conditions
- Accurate output over voltage protection to safeguard 12V equipment
- · Compact and lightweight design



Specifications	SM-107	SM-107C	SM-107M
Connection	Connector	Connector	Connector
Auxiliary 12V output [20ma]	No	No	Yes
Input Voltage	23 to 30VDC	23 to 30VDC	23 to 30VDC
Output Voltage	13.5V <b>±</b> 1%	13.5V ± 1%	13.5V ± 1%
Efficiency at typical operating conditions	≥ 90%	≥ 90%	≥90%
Bulk charge current	7 Amps	7 Amps	7 Amps
Stand by Current	20mA	20mA	20mA
RF noise level complies to AS2064	Yes	Yes	Yes
Over Voltage Protection	Yes	Yes	Yes
Control wire	No	Yes	Yes
Input and charge status indication	Yes	Yes	Yes
Dimensions W x H x L mm	75x35x100	75x35x100	75x35x100
Weight	250g	250g	250g



# 24V To 12VDC Single Circuit Switchmode Voltage Reducer

- · High efficiency switchmode technology
- Overload, short circuit, over voltage and thermal protection
- Compact and lightweight aluminium heatsink construction



Specifications	SM 110	SM 120	SM 130
Input Voltage	20 to 30VDC	20 to 30VDC	20 to 30VDC
Output Voltage	$13.8V \pm 3\%$	13.8V ± 3%	13.8V ± 3%
Efficiency	≥ 90%	≥ 90%	≥ 90%
Output current	10 Amps	20 Amps	30 Amps
Stand by Current	20mA	40mA	40mA
Short Circuit Protection	Yes	Yes	Yes
Output Over Voltage Protection	Yes	Yes	Yes
Overload Protection	Yes	Yes	Yes
Thermal Protection	Yes	Yes	Yes
Output Connections	Fly Leads	Fly Leads	Fly Leads
Dimensions L x W x H mm	90 x 135 x 62	155 x 135 x 62	175 x 135 x 62
Weight	633g	1216g	1331g



New High Performance
24V To 12VDC
Available in 40A and 60A
SWITCHMODE VOLTAGE REDUCERS

- Microprocessor based, improved output stability, protection and status indications
- . High efficiency switchmode technology
- . Control wire via ignition
- Thermal, over voltage, overload and short circuit protection
- Compact and lightweight aluminium heatsink construction
- Able to suit most applications where high efficiency and regulated 12V is required



1			
_	Specifications	REC-1240R	REC-1260R
ı	Input Voltage	23 to 30VDC	23 to 30VDC
1	Output Voltage Absorption/Float	13.5V ± 1%	13.5V ± 1%
ı	Efficiency at typical operating conditions	≥ 85%	≥ 85%
	Bulk charge current	40 Amps	60 Amps
	Stand by Current	20mA	20mA
	Short Circuit and Overload Protection	Yes	Yes
ı	Over Voltage Protection	Yes	Yes
ı	Thermal Protection	Yes	Yes
ı	Input and Output status indication	Yes	Yes
-	Output Connections	Fly Leads	Fly Leads
	Dimensions L x W x H mm	285x175x65	285x175x65
	Weight	2.5Kg	2.6Kg



New High Performance 24V To 12VDC Available in 40A and 60A SWITCHMODE BATTERY EQUALIZER

- Microprocessor based, accurately insures that the voltage on both batteries remains equal even under highly unbalanced 12V current
- Status indication for both 24V and 12V buses
- · High efficiency switchmode technology
- Improved reliability and extends battery life
- Control wire via ignition
- Current limiting under overload and short circuit conditions
- Thermal and over voltage protection
- Compact and lightweight aluminium heatsink construction



I	Specifications	REC-1240E	REC-1260E
	Input Voltage	23 to 30VDC	23 to 30VDC
ı	Output Voltage	½ Input Voltage ± 3%	½ Input Voltage ± 3%
ı	Efficiency at typical operating conditions	≥ 85%	≥ 85%
	Bulk charge current	40 Amps	60 Amps
ı	Stand by Current	20mA	20mA
	Short Circuit and Battery reversal Protection	Yes	Yes
	Over Voltage Protection	Yes	Yes
ı	Thermal Protection	Yes	Yes
	12V and 24V status buss indication	Yes	Yes
ı	Output Connections	Fly Leads	Fly Leads
ı	Dimensions L x W x H mm	285x175x65	285x175x65
	Weight	2.5Kg	2.6Kg

#### 28

# DC TO AC POWER SOLUTIONS

- Lightweight Easy Installation Reverse Polarity and Output Short Circuit Protection Proven Quality • Modern Design • Soft Start • Input to Output Isolation • Portable
  - Overload and Low Battery Shutdown / Alarm











INV150-12

INV350-12

INV600-12

~	
T	
9	į
0	
>	
Z	

				_	_								ī		
Weight (Kg)	6.0	1.2	2.7	4.3	4.6	10		6.0	1.2	2.7	4.6	10			
$(L \times W \times H)$ (mm)	125x102x65	180x102x65	245x175x85	340x250x90	465x250x90	480x210x160		125×102×65	180x102x65	245x175x85	465x250x90	480x210x160			
DC Input Size	10-15.5V	10-15.5V	10-15.5V	10-15.5V	10-15.5V	10-15.5V		20-30V	20-30V	20-30V	20-30V	20-30V			
Low Battery Voltage Range	10.5V/10V ±0.5V		21V/20V ±0.5V	$21V/20V \pm 0.5V$	21V/20V ±0.5V	21V/20V ±0.5V	21V/20V ±0.5V								
No Load Alarm/Shutdown	300mA	350mA	500mA	600mA	700mA	800mA		300mA	350mA	400mA	500mA	600mA			
Efficiency	>85%	>85%	>85%	>85%	>85%	>85%		>85%	>85%	>85%	>85%	>85%			
Wave Form	Modified Sine		Modified Sine	Modified Sine	Modified Sine	Modified Sine	Modified Sine								
GPO's	_	_	_	2	2	2		_	<del></del>	_	2	2		500 Models	
DC Input	Cigarette	Alligator Clips		Cigarette	Alligator Clips	Alligator Clips	Alligator Clips	Alligator Clips		Remote Control (On/Off) suits INV1000 & INV1500 Models	Remote Control (On/Off) suits INV2500 Model				
Surge output	300W	700W	1200W	2000W	3000W	5000W	utput	300W	700W	1200W	3000W	5000W		Control (On/Off)	Control (On/Off)
Rating - 240V AC	150W	350W	W009	1000W	1500W	2500W	240V AC	150W	350W	W009	1500W	2500W		Remote C	Remote C
Model No. Rating 12V DC Input – 240V AC	INV150-12	NV350-12	INV600-12	INV1000-12	INV1500-12	INV2500-12	24 DC Input – 240V AC output	INV150-24	INV350-24	INV600-24	INV1500-24	INV2500-24		RC1500	RC2500

# **GSL Electronics**

www.gsl.com.au









SW1200-12

Ī	N	
	7	
	0	
	5	
	Σ	
	≤	
	S	
١	\	

12V DC Input – 2

SW150-12 SW350-12

Model No.

SW1200-12 SW1800-12 SW3000-12

SW650-12

SW350-12

Weight (Kg)	2	5	6	15	18	30
$(L \times W \times H)$ (mm)	210 x 165 x 100	$310 \times 165 \times 100$	$360 \times 282 \times 115$	465 x 282 x 115	$405 \times 282 \times 182$	565 x 282 x 182
DC Input Size	10-15.5V	10-15.5V	10-15.5V	10-15.5V	10-15.5V	10-15.5V
Low Battery Voltage Range	10.5V/10V ±0.5V	10.5V/10V ±0.5V	10.5V/10V ±0.5V	10.5V/10V ±0.5V	10.5V/10V ±0.5V	10.5V/10V ±0.5V
No Load Alarm/Shutdown	<450mA	<450mA	<350mA	<350mA	<350mA	<350mA
Efficiency	%06<	%06<	> 93%	> 93%	>93%	>85%
Wave Form	Sine Wave	Sine Wave	Sine Wave	Sine Wave	Sine Wave	Sine Wave
GPO's	,-	-	2	2	2	7
OC Input	ette	or Clips	Lugged Lead	ugged Lead	ugged Lead	.ugged Lead
DC	Cigarette	Alligato	Lugge	Lugge	Lugge	Lugge
Surge DC Is output	450W Cigar	1050W Alligato	1950W Lugge	3600W Lugge	5400W Lugge	9000W Lugge

	210 × 165 × 100	310 x 165 x 100	360 x 282 x 115	465 x 282 x 115	405 x 282 x 182	565 x 282 x 182	
	210 x 1	310 x 1	360 x 2	465 x 2	405 x 2	565 x 2	
	20-31V	20-31V	20-31V	20-31V	20-31V	20-31V	
	21V/20V ±0.5V	$21V/20V \pm 0.5V$	21V/20V ±0.5V	21V/20V ±0.5V	21V/20V ±0.5V	21V/20V ±0.5V	
	<350mA	<350mA	<350mA	<350mA	<350mA	<350mA	
	%06<	%06<	>93%	>93%	>93%	>83%	
	Sine Wave	Sine Wave	Sine Wave	Sine Wave	Sine Wave	Sine Wave	
	-	_	2	2	2	2	
	Cigarette	Alligator Clips	Lugged Lead	Lugged Lead	Lugged Lead	Lugged Lead	
utput	450W	1050W	1950W	3600W	5400W	M0006	
24 DC Input – 240V AC output	150W	350W	650W	1200W	1800W	3000W	
24 DC Input -	SW150-24	SW350-24	SW650-24	SW1200-24	SW1800-24	SW3000-24	

Remote Control (On/Off) suits SW650 SW1200, SW1800 and SW3000. 12V and 24V Models

15 18

0 2 7

**GSL Electronics** www.gsl.com.au

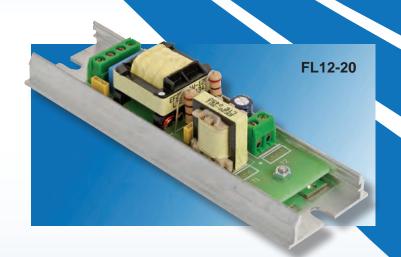
RC-SW



# Fluorescent Lamp For T8 Tubes LOW VOLTAGE INVERTERS

#### **Features:**

- · Sinewave high efficiency with low current drain
- · Protection against reverse polarity connection
- Connection to both input and output via screw terminals located on PCB
- Compact and lightweight aluminium heatsink construction
- Optional extruded aluminium cover available, refer table for applications
- Pre-punched slots at either end of heatsink for ease of installation



Specifications	FL12-20	FL12-40	FL24-20	FL24-40	FL24-40ST	FL24-20LP
Fluorescent Tube Rating	18W- 24W	30W- 40W	18W- 20W	30W- 40W	30W- 40W	18W- 20W
Operating Voltage	9-15VDC	9-15VDC	20-30VDC	20-30VDC	20-30VDC	20-30VDC
No Load Current	$0.39A \pm 5\%$	$0.43A \pm 5\%$	$0.15A \pm 5\%$	$0.1A \pm 5\%$	$0.1A \pm 5\%$	0.15A ± 5%
Full Load Current	$1.5A \pm 5\%$	2A ± 5%	$0.49A \pm 5\%$	$0.8A \pm 5\%$	$0.8A \pm 5\%$	0.49A ± 5%
Light Loss Protection	No	Yes	No	Yes	Yes	Yes
Dimensions L x W x H (mm)	130 x 40 x 30	150 x 40 x 30	110 x 40 x 30	150 x 40 x 30	93 x 49 x 40	110 x 40 x 30
Optional Cover FLC-1	Yes	Yes	Yes	Yes	Yes	Yes
Pre - Punched Mounting Slots	Yes	Yes	Yes	Yes	Yes	Yes

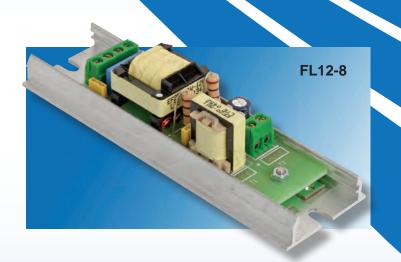
Note: - These products suit T8 tubes only



# Fluorescent Lamp For T5 Tubes LOW VOLTAGE INVERTERS

#### **Features:**

- · Sinewave high efficiency with low current drain
- · Protection against reverse polarity connection
- Connection to both input and output via screw terminals located on PCB
- Compact and lightweight aluminium heatsink construction
- Optional extruded aluminium cover available, refer table for applications
- Pre-punched slots at either end of heatsink for ease of installation



Specifications	FL12-8	FL12-13	FL24-8	FL24-13
Electrical System Type	12V Neg. Earth	12V Neg. Earth	24V Neg. Earth	24V Neg. Earth
Current Draw	0.87A	1.3A	0.42A	0.64A
Fluorescent Tube	8W T5	13W T5	8W T5	13W T5
Unit Dimensions L x W x H (mm)	130 x 40 x 30			
Weight	95g	95g	95g	95g

Note: - These products suit T5 tubes only

- T5 tubes available for purchase



# Fluorescent Interior Light For T5 Tubes LOW VOLTAGE FLC SERIES

#### **Features:**

- The GSL interior FLC series are suited ideally for ceiling and wall mounting
- · Incorporates a built in on/off switch
- Suitable for mobile homes, caravans, boats and solar powered installations with either a 12V or 24V DC electrical system
- · Light weight aluminium construction
- · Fitted with a clear diffuser
- · Assembly is fixed by means of two (2) screws
- Easy tube replacement
- Utilizes slim line type 5 tubes



Sp	pecifications	FLC12-8	FLC12-13	FLC24-8	FLC24-13
Ele	ectrical System Type	12V Neg.Earth	12V Neg.Earth	12V Neg.Earth	12V Neg.Earth
Cu	rrent Draw	0.87A	1.3A	0.42A	0.64A
Flu	uorescent Tube	8W Cool White	13W Cool White	8W Cool White	13W Cool White
Tu	be Dimensions (mm)	290 x 16	516 x 16	290 x 16	516 x 16
Со	nnections		Via Twin Cable Fly	Lead (All Models)	
Dir	mensions (mm) L x W x H	335 x 68 x 42	562 x 68 x 42	335 x 68 x 42	562 x 68 x 42
We	eight	516 Grams	783 Grams	516 Grams	783 Grams

Note: - These products suit T5 tubes only

- T5 tubes available for purchase



# 12 Volt Tralier ELECTRIC BRAKE CONTROL

#### Features:

- · Compact size design for easy installation
- · Operates reliably even on roughest roads
- Adjustable brake pressure via control knob
- · Suitable for single axel trailers
- · Easy connection, only four wires to connect
- · Light weight Aluminium heatsink construction
- · Can be mounted in any position
- · LED status indicator
- Designed for negative earth (ground) systems only





#### The XLE - 12 is an electronic, rugged and easily installed unit.

Specifications	XLE-12	XLE-12T*
Minimum Operating Voltage	12VDC	12VDC
Nominal Operating Voltage	13.2VDC	13.2VDC
Maximum Operating Voltage	14.5VDC	14.5VDC
No Load Currents (Brakes "Off")	8mA	8mA
Full Load Current		
(Max Brake Force)	4.3 Amps	4.3 Amps
Dimensions mm ( $LxWxH$ )	95 x 58 x 30	95 x 58 x 30
Weight	174g	174g

Note: \* The use of the trailer mount model of the XLE-12T is prohibited in NSW.



#### New High Performance Advanced Micro Controlled ELECTRONIC BRAKE CONTROLLER

#### **Features:**

- · New Generation Microprocessor Based
- 12v And 24v Versions Available
- Digital Display For Accurate Setup
- · Open Circuit And Overload Indication
- Easy Setup Via 2 Push Button Switches
- · Convenient Override Slide Knob
- 3 Ramp Up Levels For Brake Speed Actuation
- Compact And Rugged Aluminium Extrusion
- 2 Axel Capability



"Designed in conjunction with leading Australian towing experts..."

Specifications	EBC-12	EBC-24
Minimum Input Voltage	9 VDC	18 VDC
Nominal Input Voltage	12 VDC	24 VDC
Maximum Input Voltage	15 VDC	30 VDC
Suitable For 12V Trailer Brakes	Yes	Yes
No Current Load	30 mA	30 mA
Maximum Load	2 Axle /14A avg	2 Axle /14A avg
Dimensions [ HxWxD [mm] ]	40 x 80 x 125	40 x 80 x 125
Weight	270 gm	270 gm



# 12V and 24V REMOTE BRAKE CONTROLLER

- Convient installation, control box can be mounted under dash.
- · New Generation Microprocessor Based
- 12v And 24v Versions Available
- Open Circuit And Overload Indication
- Easy Setup Via 2 Push Button Switches
- · Convenient Push Button
- Compact And Rugged Aluminium Extrusion
- 2 Axel Capability



Specifications	RBC-12	RBC-24
Minimum Input Voltage	9 VDC	18 VDC
Nominal Input Voltage	12 VDC	24 VDC
Maximum Input Voltage	15 VDC	30 VDC
Output	12V	12V
Suitable For 12V Trailer Brakes	Yes	Yes
No Current Load	30 mA	30 mA
Maximum Load	2 Axle /12A avg	2 Axle /12A avg
Dimensions [ HxWxD [mm] ]	40 x 79 x 81	40 x 79 x 81
Weight	200 gm	200 gm



# **12/24 Dual Voltage** REVERSE BUZZER

#### **Features:**

- Dual Voltage 12 or 24VDC
- Compact and Lightweight, black powder coated heatsink
- . A high intensity piezo buzzer
- When reverse gear is engaged on the vehicle, the reversing lamps illuminate and at the same time the module begins to sound



"The XBA-12 is designed to suit most vehicles such as 4WD's, Commercial, Forklifts and Agricultural vehicles..."

Specifications	XBA-12
System Voltage Suits	12V or 24V DC
Decibel Rating	12V at 102dB(A) - 24V at 105dB(A)
Voltage - Minimum	10VDC
- Maximum	36VDC
Input Current	40mA Average
Polarity	Suits either positive or negative earth systems
Housing	Black powder coated rigid aluminium extrusion
Sealing	Sprayed with rubber coating to protect from moisture and dust
Dimensions mm ( $LxWxH$ )	106 x 58 x 34
Weight	140 grams



# WIG - WAG Flashing Modules TIMED Flashing Modules

#### Models: TFM-12, TFM-24, STFM-24

The module is designed for the use in school buses as required by the RTA. The module is activated and operates the four amber lamps (which are fitted externally on the bus), when the bus door(s) are opened. Voltage is supplied to operate the two (2) of the four (4) amber lights alternately. The lamps remain flashing until the door(s) are closed and then for a further period of 21 to 28 seconds. The cycle is repeated each time the door(s) are opened.

TFM - 12 & TFM - 24 models are designed for use on vehicles with negative earth air pressure switches. STFM is designed for use on STA vehicles with a positive voltage feed door air pressure switches.



#### Models: FLM 24P & FLM-24N

This module is designed for use in conjunction with either STFM-24 or TFM-24 (To flash vehicle headlights alternately). The module is activated and operates only when the timer unit is activated (via the door air pressure switches) and flashes the vehicles headlights(alternately). The module is also fitted with a second channel, which may be used to dip the vehicles headlights if so desired. These can be adjusted for positive or negative fed vehicles with the movement of a jumper internally.

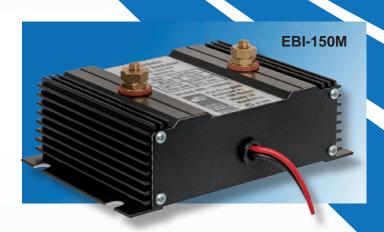
Specifications	FLM-24P	FLM-24N	TFM-12	TFM-24	STFM-24
Input Voltage DC	22V - 28V	22V - 28V	11.5V - 14V	22V - 28V	22V - 28V
Current Rating	15 Amps				
Lamp Load - Watts (at 26.0V)	390W	390W	198W	390W	390W
Positive Feed Air Pressure Switch	Yes	No	N/A	N/A	Yes
Negative Feed Air Pressure Switch	No	Yes	Yes	Yes	N/A
Adjustable Trigger (Pos. or Neg.)	Yes	Yes	No	No	No
Output Connections - Terminated to 6 Pin Plug, 6 Plugs and Terminals Supplied	6 Wires	6 Wires	5 Wires	5 Wires	6 Wires
Dimensions (LxWxHmm)	87 x 68 x 30				
Weight	125 Grams	125 Grams	125 Grams	125 Grams	140 Grams



## Electronic 100 / 150 Amp BATTERY ISOLATOR

## Features:

- Microprocessor control improved reliability, stability and life expectancy
- Effective current limiting to protect vehicle electrical system from overload
- Galvanic insulation between positive main and auxiliary terminals
- No damage with short surges up to 60V or main connections inverted
- Delay of 2 seconds to connect when enabled
- No delay to connect once enabled or to disconnect if disabled
- Voltage dip protection via 2 second delay
- Accuracy better than 0.5% or 50mV
- Custom cut off and cut in voltage available \*



	Specifications	EBI-100M	EBI-150M	EBI-100M-24
	Input Voltage	12V Neg.Earth	12V Neg.Earth	24V Neg.Earth
	Charging System Suitable For	100 Amps	150 Amps	100 Amps
_	Cut In Voltage	13.3 VDC	13.3 VDC	26.6 VDC
	Cut Out Voltage	11.8 VDC	11.8 VDC	23.6 VDC
	Reversing Polarity Protection	Yes	Yes	Yes
	Overload Protection	Yes	Yes	Yes
	Thermal Protection	Yes	Yes	Yes
	Overvoltage Protection	Yes	Yes	Yes
	2 Fly Lead - Voltage Sensing	Yes	Yes	Yes
	1/4 Brass Studs - Pos. Bat.	Yes	Yes	Yes
	Dimensions (LxWxHmm)	90 x 135 x 60	90 x 135 x 60	90 x 135 x 60
	Weight	400 Grams	400 Grams	400 Grams

\* Conditions Apply, call main office for more information.



## Micro Controlled 12V / 24V 50 Amps LOW VOLTAGE DISCONNECT

- Solid state design with accuracy better than 0.5%
- · Current limited for overload
- 2 second delay for starting of vehicle and settling of input voltage
- 2 second delay for connecting/disconnecting for voltage surges/dips
- · Less than 0.15V drop at full 50A load
- · Low standby current drain of less than 20mA
- Aluminium extrusion 120(L) X 50(W) X 40(H) mm
- LED status indicator
- Custom cut out and cut in voltages available \*



Model	Operating System	Disconnect Voltage	Capacity
LVD - 5012 - 1	12 VDC	11.5 VDC	50 Amp
LVD - 5024 - 1	24 VDC	23 VDC	50 Amp

<sup>\*</sup> Conditions Apply, call main office for more information.



# Micro Controlled 12V 20 Amps LOW VOLTAGE DISCONNECT

- · Current limited for overload
- Aluminium extrusion 120(L) X 50(W) X 40(H) mm
- Encapsulated to resist moisture ingress



Model	Operating System	Disconnect Voltage	Capacity
LVD - 2012 - 1	12 VDC	11.5 VDC	20 Amp
LVD - 2012 - 2	12 VDC	11.0 VDC	20 Amp
LVD - 2012 - 3	12 VDC	12.0 VDC	20 Amp



# **Low Battery MONITERS AND DISCONNECTS**

#### **Features:**

#### **Low Battery Disconnects**

- Low voltage disconnect to protect battery
- · Built in LED indicator
- · Spike protected
- · Low current drain
- · Warning indicator with audible buzzer \*
- · Light weight construction
  - \* "B" Model Only

## Features:

#### **Low Battery Moniter**

- Warns when battery voltage drops to 21V
- · Warning indicators via audible buzzer and lamp
- Spike protected
- · Low current drain
- · Light weight construction





Sp	ecifications	LBC-12	LBC-12B	LBM-24
Inp	ut Voltage	10V - 14V	10V - 14V	20V - 28V
Ма	x Load Current	10 Amps	8 Amps	-
Out	put Connection	4 Fly Leads	4 Fly Leads	-
Cut	: In Voltage	13.4V	13.4V	-
Cut	: Out Voltage	11V	11V	-
Wa	rnings	- LED	- LED - Audible Buzzer	- Lamp - Audible Buzzer at 22V
Ma	terial Type	ABS Plastic	ABS Plastic	ABS Plastic
Dim	nensions L x W x H mm	85x67x30	85x67x30	85x67x30
Wei	ight	19 Grams	19 Grams	19 Grams



# Intelligent Solenoid BATTERY ISOLATOR

- Detects and indicates faulty or no auxiliary battery connection
- Detects and indicates under or over voltage on main battery
- Over voltage protection isolates auxiliary battery from damage
- · Override function allows emergency jump start
- Simple Installation with 2 mounting points
- Alarm L.E.D



	Specifications	ABI-100A-12
i	Electrical System Type	12V Neg.Earth
1	Charging System Suitable For	100 Amps
	In Rush Current	400 Amps
	Current In Voltage	13.2 VDC*
	Current Out Voltage	12.4 VDC*
_	Output Connection - Brass Studs	Main and Aux. Batteries
	Alarm LED:	
ı	- On / Main Battery Over Voltage	> 14.8V
ı	- Flashing / Main Battery Under Voltage	< 10.5V
1	- Burst Auxiliary Battery Faulty or Disconnect	< 6V
ı	Dimensions L x W x H mm	60x75x65
	Weight	230gm
	* Accuracy Better Than +/- 0.	05V



# **Battery Isolator INSTALLATION KIT**



## **Features:**

- Isolator installation kit used in conjunction with BATTERY ISOLATOR product
- . Simple and Easy Installation

#### **Installation Kit Includes**

2x Battery Connection Cables2x Battery Lugs1x Earth Strap2x Battery Teminals



# 12 Volt UNINTERRUPTABLE POWER SUPPLY "Powermaster Series"

## **Features:**

- Auto changeover without interruption upon mains failure
- 10A auto 2 stage charger
- · Low voltage disconnect to protect battery
- · High efficiency switch mode technology
- Compact and lightweight anodized aluminium heatsink construction



	Specifications	UPS240-1210
	AC Input voltage	240V
7	Input Current	1.3A max
	Voltage	13.8V at No Load
	Output Current (A) approx. max.	10A
	Battery Low Voltage Disconnect Protection	9.7V to 10V
	Efficiency (Approx)	85%
ı	Indicators	AC Power and Back Up
	Protection:	Overload, Over Voltage, Short Circuit, Reverse Polarity
	Cooling	Fan, Load Activated
	Dimensions (mm) ( LxWxH )	233 x 115 x 70
	Weight	1.3 Kg

# Approvals:

Safety Standard No. N17018 C Tick No.N1408 (EMI,RFI) AS/ANZ 60950 : 2000 AS/NZS2064 Group1, Class A



# **240VAC to 12VDC** Power Supply

#### **Features:**

- · Output short circuit protected
- · Overload protected
- · Thermal fuse protection against overheating or excessive primary current
- · Low ripple voltage

Specifications	RPS12 - 5
Input Voltage	240VAC 50Hz
Output Voltage	13.8VDC ± 5% Fully Regulated
Current Rating	2 Amp Continuous
Load Regulation	Better than 1% (0 to 3 Amp)
Ripple	15mV Typical 200mV at 3 Amp
Dimensions L x W x H (mm)	190 x 102 x 75
Weight	1.7 kg

# TULLY REGULATED POWER SUPPLY Powermaster Series"

#### Features:

- · High efficiency switch mode technology
- Compact and lightweight anodized aluminium heatsink construction
- Suitable for communications equipment or where stable regulated DC voltage is required



Specifications	RPS12 - 10
AC Input Voltage	240V AC
Output Voltage	13.6V DC
Input Current	0.9 Amps
Rated Output Current	10 Amp Continuous
Efficiency	87%
Protections	Current and Temperature
Cooling	Fan
Output Connections	Red (+) Black (-) Posts
Dimensions (mm) ( LxWxH )	230 x 115 x 66
Weight	1.2 Kg

Approvals: AS/NZS 60950; 2000 Inc. Amendment 1

Approval No. 17018

C Tick Approved AS/NZS 4417



# 12VDC and 24VDC WATER LEVEL INDICATORS

- Suits negative earth systems
- Warning indication by audible buzzer and a dash-mounted lamp
- Suits water based applications in automotive, agricultural, marine and industrial equipment
- Sensor probes available to suit both plastic and metal header tanks
- · Light weight construction



	Specifications	WLI-12	WLI-24
4	Input Voltage	11V-14VDC	22V-28VDC
ı	Output Connection	6Pin Plug	6Pin Plug
	Warning Indication	Audible Buzzer and dash lamp (min 2W Globe)	Audible Buzzer and dash lamp (min 2W Globe)
_	Probes	Plastic P/N 230058 Metal P/N 230061	Plastic P/N 230058 Metal P/N 230061
	Operating current	13mA	15mA
ı	Dimensions L x W x H mm	85x67x30	85x67x30
_	Weight	90g	90g
1			



# Water Level Indicator INSTALLATION KITS



Model: 230058
Probe Kit
Suits Plastic Tanks



Model: 230059 121 mm Probe Kit Suits Plastic Header Tanks



Model: 230061
Probe Kit
Suits Metal Tanks

Other Products			
Part No.	Includes		
WLI 12V/M	Buzzer Kit And Metal Probe		
WLI 12V/P	Buzzer Kit And Plastic Probe		
WLI 12V/LP	Buzzer Kit And Long Plastic Probe		
WLI 24V/M	Buzzer Kit And Metal Probe		
WLI 24V/P	Buzzer Kit And Plastic Probe		
WLI 24V/LP	Buzzer Kit And Long Plastic Probe		
AB3452	Buzzer Only		



# ABS Plastic / Alloy Housing C/W MOUNTING LUGS







Specifications	VW450	VW460	VW480
Dimensions mm (L x W x H)	66 x 86 x 31	68 x 112 x 36	73 x 92 x 31.5
Overall Length inc Lugs	133mm	108mm	92mm
Cable Entry Hole	Yes	No	Yes
Lug Hole Diameter	4mm	4mm	4.8mm
Material Type	High Impact Polystyrene	High Impact Polystyrene	Alloy
Material Flammability	UL <b>-</b> 94	UL - 94	-
High Distortion Temperature	85°C	85°C	-



GSL Electronics designs and manufactures power conversion and electronic equipment for the automotive and communications industries. We take pride in delivering quality products at very competitive prices.

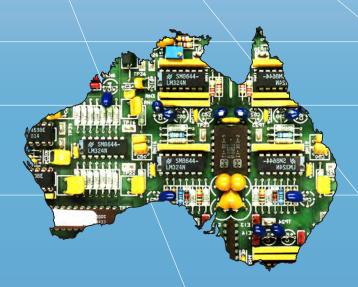
Our range includes voltage reducers, voltage doublers, battery chargers, dual battery isolators, fluorescent lights, light inverters, power inverters, power supplies, brake controls and reversing alarms.

Today you will find GSL products distributed by leading wholesalers and dealers throughout Australia and New Zealand. We say Thank you to the support of all our customers.

GSL has a fully trained and permanent workforce which enables us to maintain a consistently high standard of manufacturing. Our engineering, technical and production personnel bring many years of industry knowledge to each product.

GSL's commitment to research and development means we have a solid understanding of the proven manufacturing technologies. We also monitor new technologies to identify those that are likely to be of future interest to our customers and strategic partners.

We welcome enquiries from prospective distributors. To discuss the benefits of becoming a GSL distributor, contact us today.





Distributed By:

GSL ELECTRONICS
UNIT 2, 1 ST JAMES PLACE
SEVEN HILLS NSW 2147
ABN 30 053 250 472

Tel: (02) 9620 9988
Fax: (02) 9620 9899
Website: www.gsl.com.au
Email: sales@gsl.com.au