#### 392 Optoelectronics, Indicators, Lamps & Displays

# FARNELL Inone

## **Solar Panels - continued**

## **Medium Power Modules - continued**

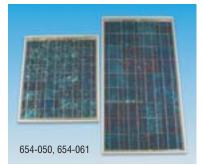
Mftrs. List No.	L	W	D	Nom. Volts	Amps @ pp	Volts @ pp
SX-5M	269	249	23	12	0.27	16.5
SX-10M	420	269	23	12	0.58	17.1
SX-20U	423	502	50	12	1.17	17.1
SX-30U	591	500	50	12	1.86	17.2
BP-350U	937	500	50	12	3.08	17.2

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Mftrs. List No.	Order Code	Price Each
SX-5M	654-024	9,337.00
SX-10M	654-036	10,950.00
SX-20U	654-048	17,741.00
SX-30U	654-050	28,795.00
BP-350U	654-061	30,281.00

## Value Line Modules3

## **SOLAREX**



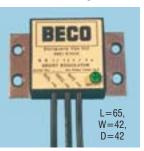
- VLX-32, 32 watt module VLX-53, 53 watt module
- Large junction box
- Can be configured to 6V or 12V
- Clear-anodised aluminium frame
- Tempered glass/EVA laminate construction

Mftrs.				Nom.	Amps	Volts
List No.	L	W	D	Volts	@ pp	@ pp
SX-30U	591	500	50	12	1.86	17.2
BP-350U	937	500	50	12	3.08	17.2
						OPT3

Mftrs. List No.	Order Code	Price Each
SX-30U	654-050	28,795.00
BP-350U	654-061	30,281.00

## **Solar Shunt Regulator**

## **Beco Solar**



- 12 Volt, 6 amp solid state shunt regulator
- Temperature compensated
- Fully encapsulated
- LED status indication Blocking diode included

The BECO Solar Shunt Regulator is designed to limit the voltage to which a lead acid battery can be driven when on charge from a photovoltaic (solar) module or array. The unit is set to regulate at 14.6 volts and operation is indicated by an LED. Suitable for use with any 12 volt (nominal) module(s) up to a maximum of 6 amps.

Price Each

Mftrs. List No. BR1/12/6

**Order Code** 653-925

3,678.00

## **Laser Diode Modules**

## **Self-Contained**

# **IMATRONIC**





Red=Supply +ve, Black=Supply -ve

A range of self-contained continuous wave visible laser diode modules. Applications include alignment, bar code readers, robotic control, target designation, positioning and security

- Choice of output wavelengths: 633nm and 670nm
- Output power options: Class 2 (1mW), Class 3a (3, 5mW)
- Choice of housings: 11mm or 16mm User adjustable focusing (tool supplied)
- Integral drive circuitry
- Output power stabilisation
- Reverse polarity protection LED emission indicator

Wavelengths: 633nm\*, 670nm

Miniature -  $4 \times 2$ , Compact -  $5 \times 2$  (Class 2)  $5 \times 2$  (Class 3a) Miniature -  $35-\infty$ , Compact -  $150-\infty$  (Class 2)  $20-\infty$  (Class 3a) Beam size at aperature (mm): Focusing range (mm):

\*Approximately nine times brighter than comparable 670nm versions.

Operating voltage: 4V to 6V DC

-10°C to +40°C Storage temperature: -20°C to +65°C Operating temperature: MTTF in excess of 10,000 hours at its operating temperature range Operational life:

WARNING: These devices are laser diode modules and conform to BS (EN) 60825 emission criteria. Do not look directly into the laser beam. Eye protection should be worn as blink response is not sufficient to protect the human eye.

<1mW visible - class II, 3mW & 5mW visible - class IIIa.

			Price Each	
Module Type	Order Code	1+	3+	+
Miniature, 0.9mW, 670nm	121-6290	7,128.00	6,562.00	
Miniature,.9mW, 633nm	121-6294	12,138.00	8,758.00	
Miniature,3mW, 670nm	121-6291	7,901.00		
Miniature,5mW, 633nm	121-6313	18,134.00	15,186.00	
Compact, 0.9W, 670nm	121-6292	7,484.00	5,223.00	
Compact, 0.9mW, 633nm	121-6295	11,033.00	6,026.00	
Compact,3mW, 670nm	121-6293	12,269.00		

## **OEM Laser Diode Modules**







Connections Red=Supply +ve, Black=Supply -ve



- Low Cost Miniature Design
- Automatic Power Control
- 3.0Vdc Operating
- Adjustable or Fixed Focus Options (650nm)
- Red or High visibility Green Options

A range of laser diode modules designed for OEM applications with the lowest cost, miniature size and beam focussing requirements.

These modules are ideal for a wide range of low power laser applications, such as general sighting, levelling and positioning.

The red laser modules are available with either a fixed or adjustable focus, the wavelength being in the red region at 650nm.

The green 532nm diode pumped solid state modules use a laser diode pumped Nd:YVO<sub>4</sub> crystal coupled with KTP as a frequency doubler to generate green light. These modules produce a high visibility beam which appears up to ten times brighter than a red laser for the same 1mW power output. Additional heat sinking may be required for continuous operation. A pulsed green laser module is available with modulation up to 1 kHz and a power output from 1.5 to 2.99mW.

				Su	oply	Wave-	Beam	Supply	Output		
	Module	size (mm)		VC	lts	length	Dia.	current	power	Max	Mftrs.
Colour	Dia.	Length	Focus	(min)	(max)	(nm)	(mm)	(mA)	max (mW)	Modulation	List No.
Red	10.5	17	Fixed	2.7	6	650	5.8	45	1	_	PLP6501FR
Red	10.5	17	Adj.	2.7	6	650	5.8	45	1	_	PLP6501AR
Green	12	56.5	Fixed	_	3	532	1	350	0.99	_	GMP532-1F3-C
Green	12	56.5	Fixed	_	3	532	1	350	2.99	1kHz	GMP532-3F3-P

WARNING: These devices are laser diode modules and conform to BS (EN) 60825 emission criteria. Do not look directly into the laser beam. Eye protection should be worn as blink response is not sufficient to protect the human eye.

<1mW visible - class II, 3mW & 5mW visible - class IIIa.

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+
7.00
7.00
5.00
5.00
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