

## FEATURES

- Fully integrated with Kopin CyberDisplay® 230K color displays, backlights, lenses and drive electronics
- Plug and Play  
Just provide 3.3 volt power and video signal (auto-selecting for either NTSC or PAL standard)
- QVGA resolution (320 x 240)
- Large image size (35" diagonal at 7 foot distance)
- High-quality optics
  - 24 degree field of view
  - 20 mm eye relief
  - 10 mm exit pupil
- 63.5 mm Interpupillary Distance (IPD)
- Compact size (97.5 mm x 22.0 mm x 23.75 mm)
- Lightweight (26 g)
- Low power consumption (< 370 mW)

## MECHANICAL OUTLINE

### DISPLAY MARKETING

Tel: 508-870-5959 Fax: 508-870-0660

### HONG KONG

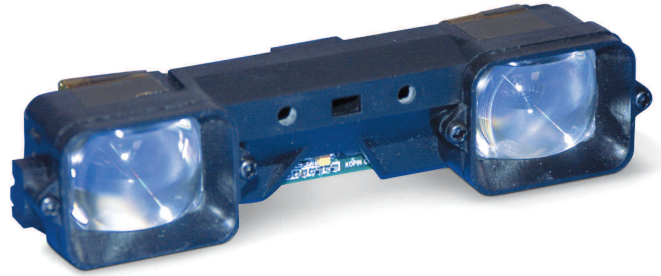
Tel: 852-2607-4151 Fax: 852-2607-4156

### JAPAN

Tel: 81-3-5325-3549 Fax: 81-3-5322-2929

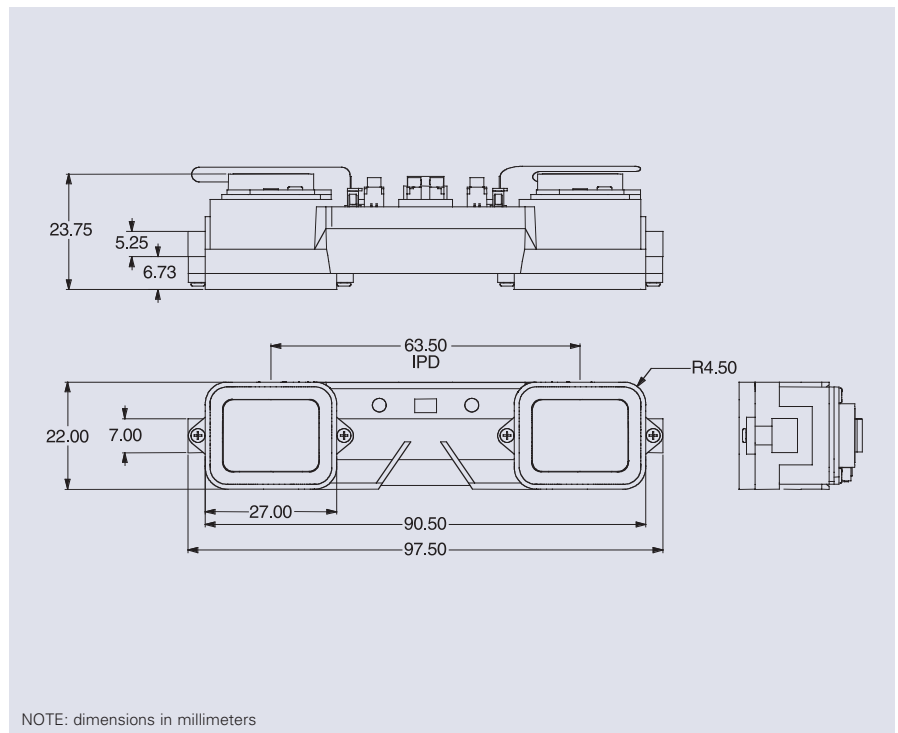
### KOREA

Tel: 82-31-337-2451 Fax: 82-31-335-7680  
cyberdisplay@kopin.com



### Fully Integrated Binocular Video Eyewear Subsystem

Speed up your Eyewear development with our BDM-230K which delivers a large (35" diagonal at 7 foot distance), crisp image for comfortable extended viewing of movies and TV on the go and playing mobile games. This light-weight, compact module is a fully operational video subsystem that is ready to incorporate into your own Eyewear design with minimal effort. The module integrates two CyberDisplay® 230K color-filter displays, LED backlights, a pair of pre-aligned high-quality lenses, and the drive electronics.



\*Specifications subject to change without notice

The BDM-230K  
 is a fully operational  
 binocular video  
 subsystem with  
 QVGA resolution that  
 is ready to incorporate  
 into your own  
 Eyewear design  
 with minimal effort.

### MECHANICAL

Dimension	97.5 mm (W) x 22.0 mm (H) x 23.75 mm (D)
Weight	26 g

### CYBERDISPLAY 230K

Resolution	320 x 240 (QVGA)
Diagonal Size	0.24" (6 mm)
Active Area	4.80 mm x 3.60 mm
Color Configuration	Vertical stripe

### OPTICAL

Field of View	24° diagonal
Virtual Image Size	35 inches diagonal at 7 feet
Eye Relief	20 mm
Exit Pupil Diameter	10 mm
Interpupillary Distance	63.5 mm
Effective Focal Length	14.16 mm
Back Focal Length	6.37 mm (-0.5 diopter/2 meter object focus)

### ENVIRONMENTAL

Storage Temperature	-20°C to 80°C
Operating Temperature	0°C to 60°C
Humidity	40°C at 80% humidity for 240 hours
Shock	3 foot drop to concrete
Vibration	20 Hz to 2000 Hz, 6 G's RMS maximum 3 axes

### ELECTRICAL

CONNECTOR	VENDOR PART #	PIN #	SIGNAL	PARAMETERS
BDM Input	JST SHR-07V-S	1	Power	110 mA @ 3.3 V
		2	Power RTN	
		3	CVBS	Composite video input
		4	CVBS RTN	
		5	Audio L	
		6	Audio R	
		7	Audio RTN	
Audio Output Right	JST SHR-02V-S	1	Audio R+	
		2	Audio R-	
Audio Output Left	JST SHR-02V-S	1	Audio L+	
		2	Audio L-	

Technical Support is available to customers via email, fax or telephone.