

Binocular Display Module
KCD-QENF-LX
MECHANICAL
Dimension 97.5mm (W) x 22.0mm (H) x 23.75mm (D)

Weight 26g

CYBERDISPLAY® * 230K
Resolution 320RGB x 240 (QVGA)

Diagonal Size 0.24" (6mm)

Active Area 4.80mm x 3.60mm

Color Configuration Vertical stripe

OPTICAL
Field of View 24° diagonal

Virtual Image Size 35 inches diagonal at 7 feet

Eye Relief 20mm

Exit Pupil Diameter 10mm

Interpupillary Distance 63.5mm

Effective Focal Length 14.16mm

Back Focal Length 6.37mm (-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 4 foot to drop to concrete

Vibration 20 Hz to 2000 Hz, 6 G's RMS maximum 3 axes

ELECTRICAL

CONNECTOR	PIN #	SIGNAL	PARAMETERS
KCD-QENF-LX input	1	Power	+3.3 VDC @ 140 mA
	2	Power RTN	
	3	CVBS	Composite video input
	4	CVBS RTN	
	5	Audio L	
	6	Audio R	
	7	Audio RTN	
Audio Output Right	1	Audio R+	
	2	Audio R-	
Audio Output Left	1	Audio L+	
	2	Audio L-	

Monocular Display Module
KCD-QMNF-ITB
MECHANICAL
Dimension 20 mm (W) x 18 mm (H) x 25 mm (D)

Weight 6.6 g

CYBERDISPLAY® * 230K
Resolution 320RGB x240 (QVGA)

Diagonal Size 0.24" (6 mm)

Active Area 4.80 mm x 3.60 mm

Color Configuration Vertical stripe

OPTICAL
Field of View 22° diagonal

Virtual Image Size 16 inches diagonal at 1 m

Eye Relief 16 mm

Exit Pupil Diameter 3 mm

Eye Pupil Offset ±2.0 mm

No Vignetting 21 mm

TV Distortion ±1.0 %

Focus Range -3.0D~+1.0D

ENVIRONMENTAL
Storage Temperature -20°C to 60°C

Operating Temperature 0°C to 60°C

Humidity 40°C at 80% RH, 240 hrs

Shock 2 foot drop to concrete

Vibration 5 Hz – 60 Hz – 5 Hz, 30 min, 5 cycles all 3 axes

ESD (Human Body Model) 2000 V electric discharge

MTBF 20,000 hours (based on accelerated testing)

Focus Dial Durability 1500 cycles, full range back to front

DIOPTER
Focus Adjustment One click (-0.4D) 12°

Full rotation 180°

Rotation force 0.2 Ncm – 0.4 Ncm

Dial backlash, radial ≤2°

Dial backlash, thrust ≤0.1 mm