

Mobileye® 8 connect™ – 3G | Technical Specification Sheet

Mobileye® 8 Connect™ Main Unit	
PHYSICAL CHARACTERISTICS	
Length	120mm
Width (without lens)	78mm
Height	44mm
Weight	200g
Color	Black
Case material	Plastic & Aluminum
Cable length (cab000400)	3m
Cable diameter	5.8mm (±0.2)
ELECTRICAL CHARACTERISTICS	
Input voltage	10-36VDC
Input current max	12v > 700mA, 24v > 350mA
Max power	8.5w
AMBIENT TEMPERATURE (AS TESTED IN LAB WITH NO RADIATION EFFECT)	
Operation	-20°C to +60°C
Storage temperature	-30°C to +85°C
VISION SENSOR	
Vision sensor	OV10642 RCCC CMOS 1.3MP
Active array size	1280H * 1080V
Optical format	1/2.56"
Size	4.2µm x 4.2µm
Dynamic range	48° (horizontal)
Shutter type	Rolling shutter
Responsivity	4.8V/lux sec (550nm)
Angle of view	52° (horizontal) 42° (vertical)
Focus range	5m to infinity
Image transfer rate	36 fps
AUDIO SYNTHESIZER	
Spl minimum	86dB @ 10cm
EYEQ4® VISION PROCESSOR MAIN FEATURES	
Hyper-thread 64bit RISC interAptiv MIPS CPU	
1GB Ethernet Port (Service port for EyeNET)	
128MB Flash x2 (for code memory redundant)	
2 x 1.6GHz, 32bit LPDDR4 SDRAM interfaces	
4 x MIPI CSI-2 Rx serial video and image preprocessing	
1 x parallel video image preprocessing input port	
3 x CAN ports (>1Mbps)	
3 x UART ports (5Mbps)	
3 x I2C Interfaces	
MANUFACTURE STANDARD	
Mobileye 8 Connect manufactured in ISO/TS 16949	

Caution

Beware when removing the system after operation as it may be hot.

For your safety, please use gloves.

Mobileye® 8 connect™ – 3G | Display unit Specification Sheet

EyeWatch Display Units		
PHYSICAL CHARACTERISTICS	EYEWATCH 3	EYEWATCH 8
Diameter	49mm	Width 84.5mm 25mm
Depth	66mm (leg open)	Leg closed: 34mm Leg open: 73mm
Height	49mm	57mm
Weight	46g	109g without cable 146g with cable
Color	Black	Black
Case material	Plastic	Plastic & Aluminum
Cable length	3m	2.5m
Cable diameter	3mm (±0.2)	3mm (±0.2)
ELECTRICAL CHARACTERISTICS		
Input voltage	5VDC	10-36VDC
Input current	50mA	120mA @ 12V
AMBIENT TEMPERATURE (AS TESTED IN LAB WITH NO RADIATION EFFECT)		
Operation temperature	-20°C to +60°C	-20°C to +60°C
Storage temperature	-30°C to +85°C	-30°C to +85°C
Operating humidity	Up to 95%	Up to 95%
DISPLAY CHARACTERISTICS		
Screen size	1.5"	3.2"
Contrast ratio	250	500
Surface luminance	LCD full color – 40mcd (min)	900 cd/m ²
Viewing angle	100°	45°/45°/45°/20°
Resolution	128 x 128 pixels	240 x 320 RGB
ADDITIONAL FEATURES		
Display colors		262k
Light sensor for automatic view day/night	Yes	Yes

Mobileye® 8 connect™ – 3G | Cellular Module Specification Sheet

3G Cellular Module	
PHYSICAL CHARACTERISTICS	
Model	SARA-U201
GSM / GRPS protocol	3.75G HSPA
Coverage area:	Global
Bands:	2G: 850/1800/1900 MHz 3G: 800/850/900/1900/2100 MHz
Data rates:	Up to 7.2 Mbit/s DL Up to 5.76 Mbit/s UL
Internet protocol version	IPv4 / IPv6 dual stack
Transport layer security	Embedded TLS 1.2
Certification	GCF/PTCRB/R&TTE/CE/FCC/IC/Anatel/RCM/Giteki
Telecommunications standards	3GPP TS 27.010
Serial interface	UART (up to 921,600 bps)
Sim voltage	1.8V
Sim size	Nano SIM 10mm X 12.5mm X 1.2mm

Mobileye® 8 connect™ – 3G | GNSS Technical Specification

RECEIVER TYPE	
Receive and track multiple GNSS systems	
Support satellite: GPS, GLONASS, BeiDou and QZSS signals	
FEATURES	
Frequency of time pulse signal	0.25 Hz...10 MHz
Module type	External module with antenna included
RTC using a crystal	External 32.768 kHz signal to the RTC input Clock and data backup on sleep mode
Voltage operation	1.65-3.6V
Dimension	40mm x 40mm
Cable length	450mm



Mobileye® 8 connect™ – 3G | Certificates

FC CE E24 10R06/00-3371-00

Mobileye®, an Intel company

www.mobileye.com

© 2019 Mobileye Vision Technologies Ltd. All rights reserved.
Reproduction in whole or in part without written permission is prohibited.