

## 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	
Operating temperature:	-20°c to + 60°c
Storage temperature:	-40°c to + 105°c
Vision Sensor	
Vision sensor:	OV10642 RCCC CMOS 1.3MP HDR
Active array size:	1280H x 1080V
Optical format:	1/2.56"
Pixel size:	4.2µm x 4.2µm
Dynamic range:	48° (horizontal)
Shutter type:	Rolling shutter
Responsivity:	4.8 V/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 x 2 (for code memory redundant)	
2 x 1.6MHz, 32bit LPDDR4 SDRAM interfaces	
4x MIPI CSI-2 Rx serial video and image preprocessing input ports	
1x parallel video image preprocessing input port	
3 x CAN ports (>1Mbps)	
3 x UART ports (5Mbps)	
3 x I2C Interfaces (1Mbs)	
4 x SPI interfaces	
Manufacture Standard	
Mobileye® 8 Connect manufactured in ISO/TS 16949 certified sites.	

Full System Electrical Characteristics	
Input voltage	10-36VDC
Input current (full operation)	1A @ 12V, 0.5A @ 24V
Max power consumption	12W

**Warning:**

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 Unit	
Physical Characteristics	EyeWatch 3
Diameter:	49mm
Depth:	24mm Leg closed: 29mm Leg open: 66mm
Height	49mm
Weight:	46g
Color:	Black
Case material:	Plastic
Cable length:	3m
Cable diameter:	3mm (±0.15)
Electrical Characteristics	
Input voltage:	5VDC
Input current:	50mA
Ambient Temperature	
*As tested in lab with no radiation effect	
Operating temperature:	-20°C to +60°C
Storage temperature:	-40°C to +105°C
Operating humidity:	Up to 95%
Display Characteristics	
Screen size	1.5"
Contrast ratio	250
Surface luminance	LCD full color - 40 mcd (min)
Viewing angle	100°
Resolution	128x128 pixels
Additional Features	
Light sensor for automatic view day/night	Yes

## Mobileye® 8 Connect™ 3G Cellular Module | Technical Specification

3G Cellular Module	
Specification	
Model	uBlox SARA-G3
GSM / GRPS protocol	3.75G HSPA
Coverage area:	Global
Bands:	2G: 850/900/1800/1900 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)
Power supply	3.3 to 4.4V
SIM Voltage:	1.8V
Sim size:	Nano SIM 10mm X 12.5mm X 1.2mm
Environmental Characteristics	
Operating Temperature:	-20°C to + 60°C
Storage temperature:	-40°C to +100°C

## Mobileye® 8 Connect™ GNSS Module | Technical Specification

Receiver type	
Receive and track multiple GNSS systems	
Support satellite: GPS, GLONASS and QZSS signals	
Features	
Frequency of time pulse signal [1PPS]	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:	5V
Dimension:	40mm x 40mm
Cable length:	450mm
Environmental Characteristics	
Operating temperature:	-20°C to + 60°C
Storage temperature:	-40°C to +100°C

## Mobileye® 8 Connect™ (3G) | Certificates



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