

# Technical Specifications

Mobileye® 8 Connect™ Main Unit			
Physical Characteristics		Focus range	5m to infinity
Length	120mm	Output interface:	12-bit DVP, MIPI/LVDS CSI-2
Width (without lens)	78mm	Image transfer rate:	36 fps
Height	44mm	Audio Synthesizer	
Weight	200g	SPL Minimum	86dB @ 10cm
Color	Black	EyeQ4® Vision Processor Main Features	
Case material	Aluminum/plastic	Hyper-thread 64bit RISC interAptiv MIPS CPU	
Cable length	3m	1Gb Ethernet Port	
Cable diameter	4.8mm	128MB Flash x 2 (for code memory redundant)	
Electrical Characteristics		2 x 1.6GHz, 32bit LPDDR4 SDRAM interfaces	
Input voltage	10-36VDC	4x MIPI CSI-2 Rx serial video and image preprocessing input ports	
Input current min:	12v > 500mA, 24v > 250mA	1x parallel video image preprocessing input port	
Input current max:	12v > 700mA, 24v > 300mA	3 x CAN ports (>1Mbps)	
Max power:	8.5W	3 x UART ports (5Mbps)	
Environmental Characteristics		3 x I2C Interfaces (1Mbs)	
Operating temperature	-20°c to +85°c	4 x SPI interfaces	
Storage temperature	-40°c to +105°c	Manufacture Standard	
Vision Sensor		Mobileye® 8 Connect manufactured in ISO/TS 16949 certified sites.	
Vision sensor	OV10642 RCCC CMOS 13MP 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)		

EyeWatch™ Display Unit	
Physical Characteristics	
Diameter	49mm
Depth	24mm
Depth (leg closed)	29mm
Depth (leg open)	66mm
Weight	46g
Color	Black
Case material	Plastic
Cable length	3m
Cable diameter	3.1mm
Electrical Characteristics	
Input voltage	5VDC
Input current	500mA
Environmental Characteristics	
Operating temperature	-20°c to +85°c
Storage temperature	-40°c to +100°c
Operating humidity	Up to 95%
Display Characteristics	
Viewing angle	100°
Display colors (backlighting)	LCD Full color – 40 mcd (min)
Resolution	128x128 pixels
Full System Electrical Characteristics	
Input voltage	10-36VDC
Input current (full operation)	12v > 750mA, 24v > 320mA
Input current (stand-by max)	12v > 0.4mA, 24v > 0.6mA
Max power consumption	9W

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Mobileye® 8 Connect™ 3G Cellular Module	
Specification	
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	-40°c to +85°c
Storage temperature	-40°c to +100°c

Mobileye® 8 Connect™ GNSS Module	
Receiver type	
Receive and track multiple GNSS systems:	Support following satellite GPS, GLONASS, BeiDou and QZSS signals
Features	
Frequency of time pulse signal [1PPS]	10 Hz
Module Type:	External module with antenna included
Installation	Attaches on windshield for free sky view Clock and data backup on sleep mode
Voltage Operation:	1.65-3.6V
Dimension:	40mm x 40mm
Cable length:	250mm
Environmental Characteristics	
Operating temperature	-40°c to +85°c
Storage temperature	-40°c to +100°c



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