

Mobileye® 8 Connect™ | Technical Specification Sheet

Mobileye® 8 Connect™ Main Unit	
Physical Characteristics	
Length:	120mm
Width (without lens):	78mm
Height:	44mm
Weight:	200g
Color:	Black
Case material:	Aluminum/plastic
Cable length:	3m
Cable diameter:	4.8mm
Electrical Characteristics	
Input voltage:	10-36VDC
Input current min:	12v > 500mA, 24v > 250mA
Input current max:	12v > 700mA, 24v > 300mA
Max power:	8.5W
Environmental Characteristics	
Operating temperature:	-20°C to + 85°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
Output interface:	12-bit DVP, MIPI/LVDS CSI-2
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	
128MB Flash x 2 (for code memory redundant)	
2 x 1.6GHz, 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 (1Mbps)	
4 x SPI interfaces	
Manufacture Standard	
Mobileye® 8 Connect manufactured in ISO/TS 16949 certified sites.	

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:	50mA
Environmental Characteristics	
Operating temperature:	-20°C to +80°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

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

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 | Technical Specification

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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