

Mobileye® 8 connect™ – 4G | 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 1.6GHz, 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 (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™ - 4G | 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™ 4G Cellular Module | Technical Specification

4G Cellular Module	
Physical Characteristics	
Model	Telit LE910C1
Length:	182mm
Width:	55mm (Slimmest); 78.6mm in connector area (Peak)
Height:	22mm
Weight:	Modem unit: 121.9g Modem cable: 119.3g
Color:	Black
Case material:	PC/ABS
Cable length:	3000mm (±30)
Cable diameter:	6.5mm
Specification	
Protocols	LTE FDD Cat1 (10/5Mbps DL/UL), GSM/GPRS/EDGE, WCDMA up to DC HSPA+, Rel.9
Coverage area:	Global with several models LE910C1-xx
Bands:	2G: 2, 3, 5, 8 HSPA+: 1, 2, 3, 4, 5, 6, 8, 19 LTE FDD: 1, 2, 3, 4, 5, 8, 12, 13, 14, 18, 19, 20, 25, 26, 28, 28A, 66, 71
Data rates:	Up to 10Mbit/s DL Up to 5Mbit/s UL
Internet Protocol Version	IPv4 / IPv6
Transport Layer Security	SSL – several TLS
Certification	WW – depend on each model FCC /IC, PTCRB, (North America) RCM (Australia) Jade/Telec (Japan) RED/GCF (Europe) CCC/SRCC (China) Anatel (Brazil)
Telecommunications standards	TS 27.005, 27.007 and Telit Custom AT commands LTE FDD Cat.4, 3GPP release 10 compliant LTE FDD Cat.1, 3GPP release 9 compliant
Serial interface	UART (up to 3Mbps)
Power supply	12V
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, BeiDou 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:	1.65-3.6V
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™ (4G) | Certificates



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.

Mobileye®, EyeQ®, and the logos (M, Mobileye, M Mobileye) are registered trademarks or trademarks of Mobileye Vision Technologies Ltd. in the U.S. and/or in other countries. This document may include trademarks of others. Specifications are