

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)	
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™ – 4G | 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™ – 4G | Cellular Module Specification Sheet

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
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 protocols version	IPv4
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

Mobileye® 8 connect™ – 4G | GNSS Technical Specification

RECEIVER TYPE	
Receive and track multiple 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	53.5mm x 39.6mm x 17.1mm (width x length x height)
Cable length	2500mm (±50)

Mobileye® 8 connect™ – 4G | Certificates



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