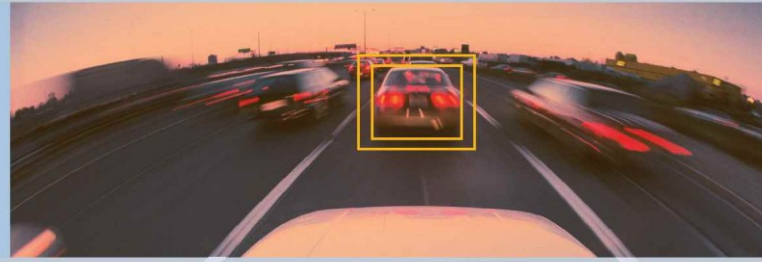# MOBILEYE C2-270™
Our Vision. Your Safety.™

Never drive without a Mobileye®. **C2-270™ Technical Documentation**

A modern and comprehensive solution for accident prevention and mitigation

4 Driver assistance applications in one system

- **Pedestrian Collision Warning (PCW)**
- **Forward Collision Warning (FCW) – Both in Highway and Urban settings, including motorcycle detection**
- **Lane Departure Warning (LDW)**
- **Headway Monitoring and Warning**

Based on Mobileye's acclaimed vehicle and lane detection technologies

Unique data logging abilities

High-intensity visual indications on an LED display, offering:

- **Vehicle detection indication**
- **Gauge for headway value monitoring**
- **Color-coded visual headway alerts**
- **Visual FCW, PCW and LDW alerts**

Fits all vehicle types, including passenger cars and commercial vehicles

Functional day and night - and in almost any weather conditions

Even two seconds of distraction can lead to a motor vehicle collision.

The Mobileye C2-270™ is a single-camera-based safety solution for collision prevention and mitigation. It uses a smart camera mounted on the interior side of the windshield, along with Mobileye's vehicle and lane detection technologies that measure the distance ('headway') to vehicles and lane markings, providing the driver with timely and often life-saving alerts. And best of all, the Mobileye C2-270™ can identify pedestrians and motorcycles, making it even more effective on the road.

The Mobileye C2-270™ is never distracted, always looking forward and ready to warn the driver of sudden danger.
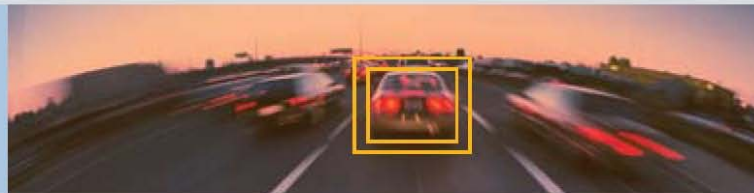
Technical Specifications

System Components

- A windshield-mounted vision sensor unit with a compact High Dynamic Range CMOS (HDRC) camera and SeeQ2® image processing board
- A high-quality audio alert buzzer
- A user-friendly, high-visibility EyeWatch2® display and control unit, for visual directional warnings with numerical headway indication and customization options.

Full Specifications

Electrical Characteristics	
Input Voltage	12-28VDC
Input current (full operation)	12v ➜ 360mA, 24v ➜ 180mA
Input current (Stand-By Max)	12v ➜ 10mA, 24v ➜ 10mA
Max Power Consumption	5.2W
Signals Input – High Voltage (Pos)	3.3v – 28v
Signals Input – Low Voltage (Neg)	< 0.8v

MOBILEYE C2-270

SeeQ2 Buzzer (camera unit)

Physical Characteristics

Length:	68mm
Width (without lens):	35mm
Height:	39mm
Weight:	94g
Color:	Black
Case Material:	Aluminum/plastic
Cable Length:	3m
Cable Diameter:	4.8mm

Electrical Characteristics

Input Voltage:	12-28VDC
Input current:	12v → 220mA, 24v → 120mA

Environmental Characteristics

Operating Temperature:	-20°c to +85°c
Storage Temperature:	-40°c to +105°c

Vision Sensor

Vision Sensor:	Aptina MT9V024 (1/3") RCC
Array Format:	Total: 752H x 480V - Active pixels: 640H x 480V
Optical Format:	1/3"
Pixel Size:	6.0µm x 6.0µm
Dynamic Range:	>55dB linear; >100dB in HDR mode
Shutter type:	Global shutter—TrueSNAP™
Responsivity:	4.8 V/lux sec (550nm)
Angle of view:	35° (horizontal)
Focus range:	5m to infinity
AGC:	Automatic Gain Control of the image sensor for high dynamic range

Audio Buzzer

SPL Minimum	86dB @ 10cm

EyeQ2® Vision Processor

332 MHz clock rate running seven parallel processes

Two MIPS24KF 32bit CPUs

Eight 64bit Vision Computing Engines (VCE)

Eight channels DMA

64bit width 512KB on-chip SRAM

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 +80°c
Storage Temperature:	-40°c to +100°c
Operating Humidity:	95%

Display Characteristics

Viewing Angle:		120 Deg
Display colors:		Red, White, Green, Blue
Intensity	Red:	8mcd (min)
	White:	40mcd (min)
	Green:	15mcd (min)
	Blue:	8mcd (min)

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