Vision 2.0

Raise the bar on driver safety with
our in-cabin & road-facing dash cam solution

Technical specifications

Platform Core

Operating System
- Google AndroidTM 9.0

Development Environment
- Google Android™ ADT

Processor
- Qualcomm, SDM450 – 2 GHz (8 x ARM® Cortex™ A53)

RAM
- 2GB (Standard) / 3GB (Enhanced)

ROM
- 16GB (Standard) /32GB (Enhanced)

Memory Card Support
- Micro SD card support (external) for 128GB, UHS-1/Class 10, 100MB/s

Watchdog
- SW based for application recovery
- HW based for system recovery

Driver Interface

HW Keys
- Multi-purpose

LEDs
- 1 X System status (3 color), 1 X Driver feedback

Light Sensor
- Configurable for IR LED activation

Internal Microphone
- High sensitivity

Internal Speaker
- 1 X 1W

Wireless Communication (with Integrated, Onboard internal antennas)

Cellular (Enhanced version)
- FDD 1/2/3/4/5/7/8/12/13/17/20/28
- GSM 850/900/1800/1900
- WCDMA 1/2/4/5/8 (DC-HSPA+)
- 3FF, Micro SIM (Internal)

GPS
- 50 Channel, NMEA 0183, AGPS.
- Satellite Systems Support: GPS, GLONASS, Beidou, Galileo

Wireless LAN
- WiFi - 802.11 b/g/n/ac 2.4/5 GHz
- Dual mode, WiFi Direct

Bluetooth
- V4.1 (Voice and Data) / BLE

NFC
- NXP, PN547, 13.56MHz, IS15693 and IS18000-3

Motion Control

Motion Sensors
- 3D Accelerometer

Integrated Cameras (not included in SmartHub-C model)

Road Facing
- 2MP, Full HD, 1080p
- Low light sensitivity
- 86dB dynamic range (HDR mode)
- 30fps
- 1100 FOV

Cabin Facing
- 2MP, Full HD, 1080p
- Near Infrared sensitivity + IR LEDs
- 68dB dynamic range (multiple exposure)
- 120fps
- 1400 FOV

Continued

Power

Internal Battery
• Li-Ion 135mAh for ordered shutdown upon power-cut
  (*Basic, Intermediate & Enhanced models only. Model C - optional)

Mechanical

Vibration
• SAE J1455 Compliant

Mechanical Shock
• SAE J1455 Compliant

Environmental

Temperature Range
• Operating: -4 °F to +158 °F (-20 °C to +70 °C)
• Storage: -22 °F to +176 °F (-30 °C to +80 °C)

Humidity
• 95% ±5%RH, +40°C, non-condensing

IP
• IP40

Drop
• MIL-STD-810G Compliant

RoHS
• RoHS II Compliant

Certifications

Standards Compliance
• FCC, IC, CE, E-Mark, PTCRB

Communication Interfaces

RS-232
• 1 X RS-232 (* Basic & Intermediate models only)
• 1 X RS232 for Debug

USB
• 1 X USB (Micro)
• [Basic\Intermediate: 3.0 High Speed]
• [Enhanced\Hub-C: USB HUB 2.0 (Host)]

Peripherals Control

GPIO
• 1Xinput(0–32V)
• 1 X Open collector Output
• 1 X I/O (configurable)

Dimensions