ADAS Camera Manual

Contents

Product Specification

Technical data	Description
Supported by	FMB640, FMC640, FMB125, FMC125, FMB225, FMC225
Camera Resolution	1280 x 720 (HD)
View angle	30 (V), 52 (H), 60 (D)
Size	80 x 120 x 50 mm
SD card	Max. 128GB
Video encoding	H264

Electrical parameters	Description
Input voltage range	9 – 36 V
Temperature	-20 °C to +70 °C (operation) -40 °C to +85 °C (storage)
Relative Humidity	Max. 90 %
Power consumption	12V max @300mA 12V Idle state @ 3mA

Interface	Description
USB	USB 2.0 (for calibration)
CAN	CAN 2.0 (Car signal – Left/Right, Speed, RPM, Brake)
RS232	Indicator TX/RC (for communication with FM device)

ADAS and FMC650 Features

Periodic photo sending

Possible to receive periodical photo from ADAS

Video/photo by request

You can request video/photo from ADAS

ADAS Features

PCW (PEDESTRIAN COLLISION WARNING)

Notifies driver of any pedestrians, bicycles or motorcycles ahead.

LDW (LANE DEPARTURE WARNING)

Helps to regain direction if the driver unintentionally departs lanes.

FCW (FORWARD COLLISION WARNING)

Sends warning alerts if a crash is imminent to assist driver in maintaining a safe traveling distance.

FPW (FORWARD PROXIMITY WARNING)

Notifies driver if the vehicle moves forward while another vehicle is in the detection range, which can be setup at 1 m, 2 m, 3 meters.

FVSA (FRONT VEHICLE START ALARM)

Notifies driver if the front vehicle started moving forward from 0 speed without the vehicle moving within 2 secs.

SDA (SAFETY DISTANCE ALERT)

Attracts the driver's attention to keep the safe distance ahead by warning the driver (active from 30km/h).

DVR (DIGITAL VIDEO RECORDER)

Records scenes as HD+HD resolutions into SD card before and after an accident. (Every minute in a loop)

SLR (SPEED LIMIT RECOGNITION)

Recognizes speed limit signs and provides warnings for over speed (Available with ADAS Plus).

ADAS data transferring timing

Test was performed using Baudrate 460800

Image resolution	Image compression (%)	Video duration (s)	Size of image	Size of video FMC640 4G / FMB640 2G	Time interval (s) from trigger to files received on server FMC640 4G / FMB640 2G	Photo example
			Image			
640x480	0	-	~10kB	-	48s / 70s	
1280x720	0	-	~28kB	-	67s / 103s	
			Video			
640x480	0	10s	-	~144kB	86s / 198s	
640x480	25	10s	-	~140kB	58s / 144s	
640x480	50	10s	-	~139kB	48s / 110s	
640x480	0	20s	-	~285 kb	183s / 400s	
640x480	25	20s	-	~201 kb	155s / 349s	
640x480	50	20s	-	~150 kb	145s / 400s	
640x480	0	30s	-	~439 kb	201s / 501s	
640x480	25	30s	-	~390 kb	185s / 3558s	
640x480	50	30s	-	~239 kb	180s / 550s	
1280x720	0	10s	-	~286KB	90s / 261s	
1280x720	25	10s	-	~260KB	78s / 215s	https://wiki.teltonika-gps.com/view/File:481012_Adas_apkirptas_2.mp4
1280x720	50	10s	-	~235KB	70s / 211s	
1280x720	0	20s	-	~590 kb	120s / 502s	
1280x720	25	20s	-	~494KB	111s / 430s	
1280x720	50	20s	-	~460KB	100s / 297s	
1280x720	0	30s	-	~1MB	241s / 710s	
1280x720	25	30s	-	~720KB	163s / 540s	
1280x720	50	30s	-	~695KB	160s / 512s	

* **NOTE:** This approximate time which we receive during testing in real cases can be different.

* **NOTE** Image compression is a type of data compression applied to digital images, to reduce their cost for storage or transmission. Algorithms may take advantage of visual perception and the statistical properties of image data to provide superior results compared with generic data compression methods which are used for other digital data.