VIA
Mobile360 Forklift Safety System

Forklift safety system with flexible people detection and driver safety system packages
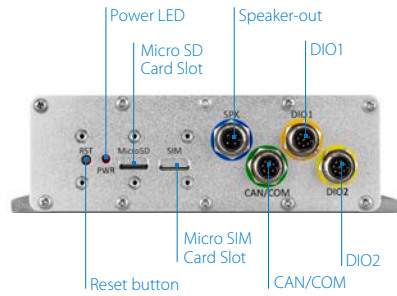

Features

■ 2PD (front and rear) and 3PD (left, right, rear) packages

■ Driver Safety System supporting driver fatigue, smoking, and phone usage alerts

■ 9~36V DC-in with ACC/IGN support; optional 36V~100V DC power module for EV forklifts.

■ Optional 7" IP67 CVBS display and Forklift Speed & Light Sensor Kits

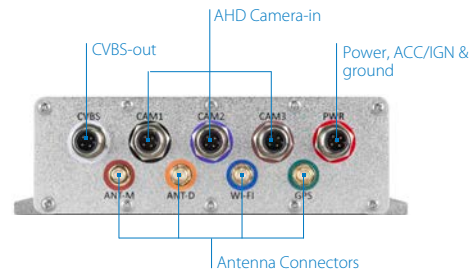■ Ruggedized design to meet IP67 water resistance standards

Specifications

Model Name	Mobile360 M500
Processor	1.2GHz ARM Cortex-A7 dual-core SoC with deep learning accelerator
System Memory	1GB DDR3 SDRAM
Storage	512MB SPI NAND Flash ROM 1 Micro SD Card Slot
Wireless Connectivity	1 GPS/Beidou module 1 Wi-Fi 802.11b/g/n/ac module
Sensor	1 6-Axis IMU
Expansion I/O	1 MiniPCIe slot for 4G module
Front Panel I/O	2 M12 8-pin DIO avionic connectors 1 M12 CAN/COM (supports TX/RX for RS-232) avionic connector 1 M12 speaker avionic connector 1 Micro SD card slot 1 Micro SIM card slot 1 Power LED 1 Reset button
Back Panel I/O	1 M12 CVBS-out avionic connector 3 M12 AHD camera avionic connectors 1 M12 9~36V, ACC/IGN & ground avionic connector 4 Antenna connectors (4G x 2, Wi-Fi, GPS)
Bottom Opening Covers	Open window with removable plate to access MiniPCIe slot for 4G LTE module
Power Supply	9~36V DC-in with ACC/IGN
Operating System	Embedded Linux
Operating Temperature	-20℃ ~ 70℃
Storage Temperature	-30℃ ~ 70℃
Operating Humidity	0~95% (non-condensing)
Vibration Loading During Operation	ISO-16750-3 Test VII compliance
Shock During Operation	ISO-16750-3 Test VII compliance
Mechanical Construction	Aluminum alloy top cover Metal chassis housing
Dimensions	178mm(W) x 53.8mm(H) x 194.6mm(D) (7.01" x 2.12" x 7.66")
Weight	1.44kg (3.17lbs)
Ingress Protection Rating	IP67
Compliance	CE, FCC, NCC, Telec, SRRC, CTA, UKCA

Front Panel External I/O

Power LED
Speaker-out
Micro SD Card Slot
DIO1
Reset button
Micro SIM Card Slot
CAN/COM
DIO2

Back Panel External I/O

CVBS-out
AHD Camera-in
Power, ACC/IGN & ground
Antenna Connectors

Ordering Information

Part Number	SoC Frequency	Description
M360-M500-6D12A3 (2PD + DSS WW)	ARM Cortex-A7 dual-core SoC @ 1.2GHz	Fanless mobile system with 1.2GHz ARM Cortex-A7 dual-core SoC, 1GB DDR3 SDRAM, 2 DIO, CAN Bus, Speaker-out, CVBS-out, 3 AHD camera-in, Wi-Fi, GPS, Micro SIM card slot, Micro SD card slot, 9~36V DC-in with ACC/IGN
M360-M500-FD12A3 (2PD + DSS + 4G US)	ARM Cortex-A7 dual-core SoC @ 1.2GHz	Fanless mobile system with 1.2GHz ARM Cortex-A7 dual-core SoC, 1GB DDR3 SDRAM, 2 DIO, CAN Bus, Speaker-out, CVBS-out, 3 AHD camera-in, 4G LTE Wireless Module, Wi-Fi, GPS, Micro SIM card slot, MicroSD card slot, 9~36V DC-in with ACC/IGN
M360-M500-ED12A3 (3PD WW)	ARM Cortex-A7 dual-core SoC @ 1.2GHz	Fanless mobile system with 1.2GHz ARM Cortex-A7 dual-core SoC, 1GB DDR3 SDRAM, 2 DIO, CAN Bus, Speaker-out, CVBS-out, 3 AHD camera-in, Wi-Fi, GPS, Micro SIM card slot, Micro SD card slot, 9~36V DC-in with ACC/IGN
M360-M500-HD12A3 (3PD + 4G US)	ARM Cortex-A7 dual-core SoC @ 1.2GHz	Fanless mobile system with 1.2GHz ARM Cortex-A7 dual-core SoC, 1GB DDR3 SDRAM, 2 DIO, CAN Bus, Speaker-out, CVBS-out, 3 AHD camera-in, 4G LTE Wireless Module, Wi-Fi, GPS, Micro SIM card slot, Micro SD card slot, 9~36V DC-in with ACC/IGN

Optional Accessories

Display Options

Part Number	Description
M360-M500-1L07A1	7" IP67 CVBS (800x480) display kit with strong magnet, magnet mounting plate, rubber pads, mounting plate, four Molly bolts, and screw packs (supports VESA plates)
M360-M500-2L07A1	7" IP67 CVBS (800x480) display kit with mounting plate, four Molly bolts, and screw pack (supports VESA plates)

Driver ID Options

Part Number	Description
M360-MX00-1SCRA0	NFC Card Reader with cable, pre-attached 3M tape, and one NFC card
M360-MX00-1CRCA0	NFC card box (25 pcs)

Sensor Options

Part Number	Description
M360-M500-2S00A0	Forklift speed and reverse light sensor kit with mounting bracket and cables
M360-M500-1S00A0	Forklift speed sensor kit with mounting bracket, cable and M8 cap
M360-M500-3S00A0	Forklift reverse light sensor kit with cable and M8 cap
M360-SBS-1S0030	Wireless forklift seatbelt sensor

Power Option

Part Number	Description
M360-PWM-2P00A0	36V~100V DC power module for EV forklifts

Cable Options

Part Number	Description
M360-MX00-3C00A0	2M extension cable for cameras and 7" CVBS display
M360-MX00-5C00A1	DIO2 cable

Mount Options

Part Number	Description
M360-RAM-1RM0A1	RAM® Mount Kit for system, three AHD cameras and 7" CVBS display
M360-M500-1HSYA0	75x75mm VESA plate and screw pack for VIA Mobile360 M500 system
M360-M500-1HM2A0	Three 35x75mm VESA plates and screw packs for AHD cameras
M360-M500-2HLMA0	35x75mm VESA plate and screw pack for 7" CVBS display
M360-M500-1HDCA0	75x75mm VESA plate and screw pack for DC power module
M360-M500-1HCRA0	35x75mm VESA plate and screw pack for card reader

Dimensions

194.60 167.00 178.00
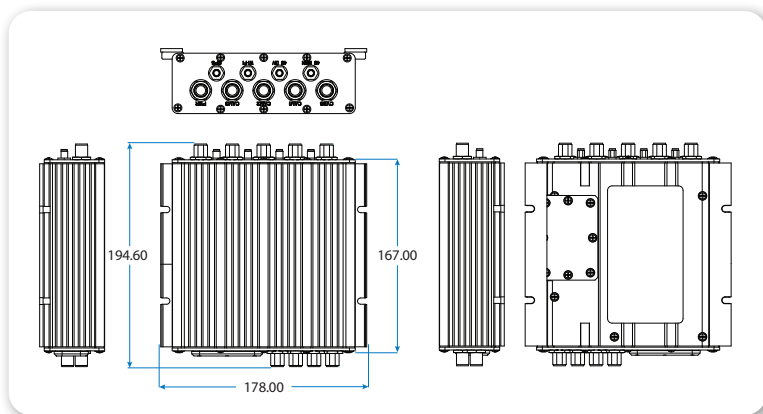
Packing List

2PD + DSS

Items
VIA Mobile360 M500 System
4 x M5 Molly bolts for system mounting
2 x Vibration dampening strips
2 x IP67 (Front and Rear) FOV 190° cameras with mounting brackets, 2 x magnets, 4 x M5 bolts, 2 x 3M tape, 4 x Molly bolts
IP67 (Driver) FOV 92° camera with mounting bracket, magnet, 2 x M5 bolts, 3M tape, 2 x Molly bolts
Front panel cover with rubber seal, 8 x M2.5 screws, and Allen wrench
Speaker
Wi-Fi and GPS antenna module
Bullet plug to blade fuse holder cable and fuses (2 x Standard, 2 x Micro, 2 x Low-Profile and 2 x Mini)
Power, ACC/IGN & ground cable
I/O connector covers for 4G antennas, DIO 1 & 2, CAN Bus, and CVBS ports
32GB MicroSD card

3PD

Items
VIA Mobile360 M500 System
4 x M5 Molly bolts for system mounting
2 x Vibration dampening strips
3 x IP67 (Left, Right, Rear) FOV 190° cameras with mounting brackets, 3 x magnets, 6 x M5 bolts, 3 x 3M tape, 6 x Molly bolts
Front panel cover with rubber seal, 8 x M2.5 screws, and Allen wrench
Speaker
Wi-Fi and GPS antenna module
Bullet plug to blade fuse holder cable and fuses (2 x Standard, 2 x Micro, 2 x Low-Profile and 2 x Mini)
Power, ACC/IGN & ground cable
I/O connector covers for 4G antennas, DIO 1 & 2, CAN Bus, and CVBS ports
32GB MicroSD card