



MESTAcompact Focus Edition

Cutting-edge, versatile traffic enforcement of the future

MESTAcompact **Focus Edition** provides state-of-the-art capabilities for monitoring speed, detecting red-light and other behavioral violations (such as not wearing a helmet/seatbelt and using a phone), across all roadside environments, spanning up to **6 lanes**. Its compact design ensures minimal impact **on the surrounding infrastructure**, making it a **standout performer day or night**.

Comprehensive automated traffic enforcement systems for safer roads

In recent years many jurisdictions have witnessed a significant drop in road casualties thanks to automated traffic enforcement systems (ATES). However, as speed-related risks decline, new dangers are emerging, endangering the most vulnerable road users (pedestrians, cyclists, two-wheelers etc.).

Beyond speed: addressing emerging road safety challenges with ATES

Combining the latest technologies, IDEMIA's MESTAcompact Focus Edition is equipped with high-end sensors, artificial intelligence and video analytics.

It detects speeding, red-light running, and complex offenses such as forbidden trajectories, not wearing a helmet/seatbelt* and using a phone while driving*.

It covers up to six lanes and classifies up to eight types of vehicles using AI. This solution helps to discourage bad driving behavior and prevent drivers from violating traffic regulations.



Easy to operate

The MESTAcompact Focus Edition offers effortless installation options, whether on a streetlight or a designated mast. Its inner modules are rotatable and feature automatic alignment, simplifying activation and maintenance processes.

Benefits



State-of-the-art performance

MESTAcompact Focus Edition combines a Doppler radar with the world's best resolution and video analytics, enhancing the quality of photos and guaranteeing a more accurate detection of vehicles.



Unrivaled resolution optics day and night

Featuring an unprecedented resolution of 70 MP, MESTAcompact Focus Edition captures high-quality color photos both during the day and at night. It also incorporates a filtering system to enhance in-car vision.



Unmatched multi-functional system

The only solution on the market that can accurately identify complex violations such as forbidden trajectories, not wearing seatbelts, phone usage while driving, and much more.

Why IDEMIA?

IDEMIA Public Security's Road Safety business line is at the forefront of creating advanced and comprehensive technologies that enhance road safety and reduce road fatalities. We specialize in crafting, manufacturing, and supporting cutting-edge, versatile advanced traffic enforcement systems. Our solutions integrate advanced embedded image

processing, Artificial Intelligence, and analytics capabilities, empowering road authorities and municipalities to deter unsafe driving behaviors, detect road violations, and protect all road users. With over four decades of experience in road safety, we've successfully deployed 13,000 traffic law enforcement systems globally.



Evolutionary platform

MESTAc^om^act Focus Edition comes with IDEMIA's SAFE platform that uses advanced analytics with unique imaging capabilities and powerful AI algorithms. It can be easily upgraded to add other detection capabilities (e.g. additional violations and vehicle classifications) to leverage traffic information and address more use cases.



Colors



Light Grey
RAL 7035



Traffic Blue
RAL 5017



Silver grey
RAL 7001



Ruby Red
RAL 3003



Anodic
Bronze



Key features

Infraction detection

- › Speeding: bidirectional, per class, from 20km/h to 320 km/h
- › Red-light running
- › Forbidden lane usage (per class or per license plate)
- › Forbidden trajectories
- › Yellow box stopping
- › Wrong direction
- › Stop-bar crossing
- › Phone usage*
- › Not using seat-belts for the front seats*
- › Not wearing a helmet for two-wheelers
- › Traffic restriction based on license plate syntax

Certifications

- › OIML R91 METAS (speed accuracy)
- › CE / CB US
- › FCC part 15.245 and 15.249

*Available during the day and requires an optional additional IR light module at night.

Characteristics

- › High-resolution (70 MP equivalent) true color pictures during the day and at night
- › Covers up to six lanes (21 meters width coverage) from 15 m to 40 m with one or two 16 MP interchangeable cameras with multiple choice of focal lengths to fit a large configuration of sites
- › Installation on roadside or central reservation, from 2.5 m up to 5 m above road level
- › Rotatable capability: the housing includes two light-weight modules that can be installed and removed very easily without adjustments
- › AI-based accurate vehicle classification (up to eight)
- › ANPR on all vehicles
- › Traffic statistics: vehicles and violations statistics are made available per class on a daily/hourly basis
- › Live video:
 - Mestac^om^act Focus Edition live video feed can be accessed remotely
 - Video feed can also be stored locally, up to 1TB storage capacity
- › Compact all-in-one housing: height 85 cm x width 32 cm x depth 48 cm
- › Weight: ~ 50 kg including two rotatable modules:
 - Measure module ~ 5kg
 - Service module ~ 10kg
- › Degree of protection: IP 66
- › Operating temperature range: - 30°C to + 60°C
- › Power consumption: typical 100 W (day) to 200 W (night) (400 W including heater)
- › Power supply configurations: 230 Vac / 110 Vac
- › Connection to central server through ADSL / 4G-5G router / fiber

Technology

- › Large beam high-end 3D/UHD FMCW multi-tracker 24GHz Doppler radar sensor
- › Multi-tracking data fusion (Doppler tracking + video tracking at 30 FPS)
- › Video analytics on CPU/GPU Jetson NVIDIA: AI-based classification, remote detection of traffic light status by dedicated camera including red and amber time measurement, AI-based phone, seatbelt and helmet detection
- › Integrated powerful near-infrared illuminator + high power white-triggered-flash
- › Non-invasive technology for vehicle detection
- › Traffic-light status: non-invasive video detection or wired connection