

#### DATABASE

The system database has the capacity to store all the data relevant to measurements performed during instrument lifetime.

The database stores information of Airports, fixture brands and models, GPS light position, measurement results, graphics, pictures and statistical data

#### REPORTING

The system provides a full and user configurable reporting capability such as:

- Isocandela Diagrams
- Maintenance and repair reports
- Lights performances bar
- ICAO Annex 14 compliance data tables

## DOCUMENTATION

SMF/M system comes with
System Manual, Operating
Manual, Test Data Report and
Calibration certificates

#### TRAINING COURSE

A complete training course will cover all the installation, operating, reporting and maintenance topics, allowing the customer to reach the complete control of the system

# SMF / M AGL Mobile Photometric Instrument



The SMF/M is a world class system for the photometric measurement of Airfield Ground Lighting system according to ICAO Annex 14 recommendations.

The system is based on the latest technologies and features optoelectronic sensors for light and color detection, a SBAS GPS for accurate light position identification and real time image processed sensors for

SMF/M is equipped with 13 LUX sensors distributed over the measurement bar in order reach the best resolution ratio with respect to light beam spread.

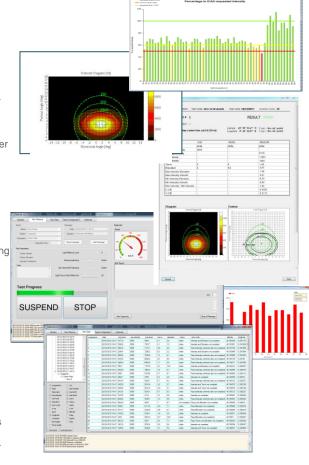
daylight operations.

Operator is assisted during driving via a monitor, which shows the relative position of the bar against the lights stream under measurement, and an acoustic tone alerting the driver that the bar is going out of the allowed course (± 25 cm allowed driving corridor)

The high speed ADC electronics of SMF/M allow to gather a large number of samples to build accurate and high resolution ISOCANDELA diagrams.

The SMF/M built-in database allows to save measurement data sets of several airports. A powerful report generator is able to provide PDF tables, graphics and data according to the selection defined by the user.

- Light Measurement according to ICAO Annex 14 recommendations
- Maximum, Average and Minimum light beam intensity,
   Elevation and Azimuth (TOE-IN) angles measurement
- Light Colour measurement according to CIE 1931
- LED fixtures supported
- Accurate GPS SBAS based light identification
- Measuring speed up to 80 Km/h
- Automatic user definable (PDF) AGL status reporting
- Measured data exportable for user purposes
- Installation compatible with any kind of vehicle
- Towable trailer mountable
- Daylight, Twilight and Night time operations





#### DIAGNOSTIC

SMF/M features an automatic self diagnostic subsystem to

#### TECHNICAL SUPPORT

Argos technical support assists customers during the whole system lifetime.

#### **EFFICIENCY**

Fast installation on commercial and industrial vehicles Rapid clearance of runway Stand-by and Resuming function for interrupted measurements

# TURNKEY SOLUTIONS

Universal Mechanical Frame
No special Vehicle required
Automatic database filling
procedure for light fixtures
positioning and identification

## INDOOR OPERATIONS

User may extend SMF/M to indoor workshop operations integrating the computer controlled turntable and software of SMF/L.

More information about Argos products and services at: <a href="https://www.argosingegneria.com">www.argosingegneria.com</a>

00156 Roma - Italy Tel. + 39 06 41 22 10 1 Fax +39 06 4111144 www.argosingegneria.com

# Characteristics



Universal Mechanical Frame

Measurement subsystem including sensor array bar equipped with 13 x photometric sensors and 1x CIE 1031 colorimeter

Light detection subsystem including an

optoelectronic sensor for light detection and ranging and a integrated camera for driving assistance and daylight measurement operations

Positioning data fusion module including GPS SBAS



Compact on-board power supply and data distribution box



Trailer mountable

# Specifications

Pivoting or conta

Odometer

- Measurement speed up to 80 Km/h
- Night, Day and Twilight operation
- High accuracy odometer with resolution better than 2mm
- 16 bit high speed A/D conversion
- Sensitivity: 0.25 LUX
- SBAS GPS based positioning Sensors Module
- Total accuracy < 5 %
- Total repeatability < 5%
- Operating temperature: -20 to + 45 °C

#### Certifications

- ENAC (Italian Civil Aviation Authority)
   Certification according to ENAC APS-02
   Technical Standard
- China Civil Aviation Authority Certification



### References

Bangladesh, China, Canada, Denmark, Italy, Korea, Russian Federation, Spain, Taiwan, Thailand, Turkey.



