MIROS
MALAYSIAN INSTITUTE OF ROAD SAFETY RESEARCH
ASEAN ROAD SAFETY CENTRE

MINISTRY OF TRANSPORT
MALAYSIA

MALAYSIA EXPO 2025 OSAKA

INFOGRAPHIC
MIROS MOTORCYCLE COLLISION ALERT SYSTEM (MCAS)

DESCRIPTIVE ANALYSIS

33 Participants

22 motorcycle models (100 - 600 cc) fitted with MCAS
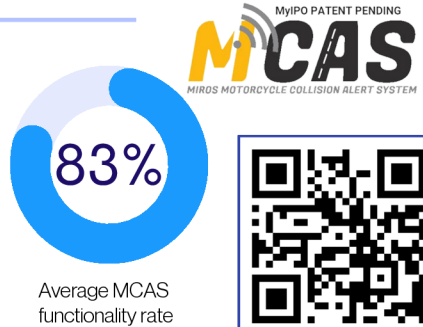
3-12 months of data collection

4,282 km participants' average kilometer travelled with MCAS

MCAS IMPACT & FUNCTIONALITY

MyIPO PATENT PENDING
MCAS
MIROS MOTORCYCLE COLLISION ALERT SYSTEM

1,013 cases where MCAS helped avoid a collision

cumulative hours of MCAS activation
3,203 hours

141,310 km cumulative distance of MCAS activation

83%
Average MCAS functionality rate

www.mcas.tech

How Does MCAS Work?

1. Laser beam from LiDAR-based sensor scans the forward space for obstacle detection.

2. GPS system is used to measure motorcycle speed and to set the minimum riding speed for alert activation.

3. Visual and audio alerts are automatically activated by MCAS system with variable alert intensity.

GPS signal
GPS signal

Obstacle

Laser beam

Motorcycle fitted with MCAS