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**General Technical Requirements of Automated Valet
Parking Systems**
自主代客泊车系统总体技术要求

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General Technical Requirements of Automated Valet Parking Systems

1 SCOPE

This document specifies the system definition, typical architectures, type classification, application scenarios, overall technical specification, and testing requirements with respect to the automated valet parking (AVP) systems.

This document is applicable to the vehicles of Category M₁.

This document is applicable to planning, design and construction of intelligent parking facility infrastructure for Category M₁ vehicles.

2 NORMATIVE REFERENCES

The following normative documents contain provisions which, through normative reference in this text, constitute essential provision of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

- GB/T 3730.1-2001 Terms and definitions of motor vehicles, trailers and combination vehicle - Part 1: Types
- GB 5768.3-2009 Road traffic signs and markings - Part 3: Road traffic markings
- GB/T 15089-2001 Classification of power-driven vehicles and trailers
- DB31/T 485-2010 Standard for Settings of Parking Signs
- ISO 16787-2017 Intelligent transport systems - Assisted parking system (APS) - Performance requirements and test procedures
- ISO/PAS 21448-2019 Road vehicles - Safety of the intended functionality
- SAE J576-1991 Plastic Materials for Use in Optical Parts Such as Lenses and Reflectors of Motor Vehicle Lighting Devices

3 TERMS AND DEFINITIONS

For the purposes of this document, the following terms and definitions apply.

3.1

response delay time

time elapsed from when the CAN bus issues an object command to when the corresponding device starts to execute

3.2

execution time

duration from when the device starts to execute the object command to when the feedback signal parameter reaches the target parameter for the first time

3.3

maximum overshoot

maximum deviation of the physical feedback signal parameter exceeding the target parameter during the device executing the command

3.4

overshoot time

time elapsed from when the feedback signal parameter reaches the target parameter for the first time to when the feedback signal occurs for the first time



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