

Recommendation **ITU-T F.747.15 (06/2024)**

SERIES F: Non-telephone telecommunication services

Multimedia services

Requirements of event-based vision systems

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Recommendation ITU-T F.747.15

Requirements of event-based vision systems

Summary

With the advantages of high time-domain resolution, less data redundancy, low power consumption, and high dynamic range, the event-based vision system (EV-SYS) can be used in power consumption sensitive, high-speed movement and extreme lighting scenarios, such as high-speed industrial detection, autonomous driving, video surveillance, high-speed imaging and robot vision. Since the EV-SYS has differences in signal acquisition, coding, transmission, analysis and application compared to traditional camera-based intelligent vision due to the asynchronous output, the traditional vision algorithms cannot be applied. None of the existing machine vision standards has developed based on EV-SYS. The EV-SYS will be used in high-speed motion scenarios beyond the existing standards. Recommendation ITU-T F.747.15 provides the related requirements and reference use cases for EV-SYS.

History*

Edition	Recommendation	Approval	Study Group	Unique ID
1.0	ITU-T F.747.15	2024-06-13	16	11.1002/1000/15909

Keywords

Event-based vision sensor, event-based vision system, requirements.

* To access the Recommendation, type the URL <https://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID.

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In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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