

Recommendation **ITU-T F.747.16 (03/2025)**

SERIES F: Non-telephone telecommunication services

Multimedia services

Requirements for 3D machine vision-based surface defect detection service of industrial products

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Recommendation ITU-T F.747.16

Requirements for 3D machine vision-based surface defect detection service of industrial products

Summary

Recommendation ITU-T F.747.16 provides the requirements for 3D machine vision-based surface defect detection service of industrial products. Three-dimensional (3D) machine vision can obtain the complete geometric information of the real 3D scene, and the images with depth information can be used to achieve high-precision measurement, detection, positioning, reconstruction, and scene understanding. It can process various types of industrial products that cannot be processed by two-dimensional (2D) machine vision (e.g., highly reflective surfaces and low-contrast surfaces), such as electronic products and printed circuit board (PCB) surface detection, free-form surface optical mirror measurement, and measurement and detection of steel product surfaces or curved surfaces, etc.

History *

Edition	Recommendation	Approval	Study Group	Unique ID
1.0	ITU-T F.747.16	2025-03-16	21	11.1002/1000/16229

Keywords

3D, defect detection service, machine vision.

* 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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