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ICS 33.040.50
CCS M42

YD

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

YD/T 6441-2025

Networking technology for industrial internet - Technical requirements for industrial Passive Optical Network (PON)ONU supporting edge computing

工业互联网联网用技术 支持边缘计算的工业无源光网络（PON）ONU技术要求

(English Translation)

Issued on: July 2, 2025 **Implemented on: November 1, 2025**

Issued by: Ministry of Industry and Information Technology

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1 Foreword

YD/T 6441-2025 was issued by Ministry of Industry and Information Technology on 2 July 2025 and has been in force since 1 November 2025.

The YD/T prefix marks a recommended standard. It is not law in itself: it becomes binding when a contract names it, when a regulation or a mandatory standard refers to it, or when a producer declares conformity with it.

The document runs to 15 pages in English translation.

2 Scope Preview

This standard specifies the technical requirements for industrial passive optical network (PON) optical network units (ONUs) supporting edge computing, including requirements for interfaces, network functions, edge computing functions, operation, management, maintenance functions, security functions, and performance. This standard applies to ONUs supporting edge computing in industrial internet scenarios.

YD/T 6441-2025 falls under ICS 33.040.50, in the field of telecommunications.

This catalogue holds 3,420 other YD/T standards in that field.

In this catalogue, YD/T standards carry edition years from 1982 to 2026.

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3 About this standard

Sector: Telecommunication Industry Standard (Recommended)

Issued by: Ministry of Industry and Information Technology

English translation: about 15 pages (approximate)

4 Related standards

Standards on related subjects:

YD/T 1092-2023 - Telecommunication cables - Foamed polyolefin dielectric, corrugated copper-tube outer conductor, 50 Ohm radio-frequency coaxial cable for wireless communications

YD/T 2165-2010 - Technical specification of modular uninterruptible power systems for telecommunications

YD/T 841-1996 - Underground communication pipe with plastic pipe

YD/T 2019.7-2026 - Test method for broadband customer networking based on public telecommunication network - Part 7: Fiber-To-The-Room (FTTR) business equipment

YD/T 2019.6-2026 - Test method for broadband customer networking based on public telecommunication network - Part 6: Fiber-To-The-Room (FTTR) residential equipment

YD/T 6443-2025 - Technical requirements for broadband customer networking based on public telecommunication network - Fiber-to-the-room (FTTR)- Residential equipment

5 Classification and status

International classification (ICS): 33.040.50

Chinese Standard Classification (CCS): M 42

Prefix YD/T: recommended standard.

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