



## 通信アプリケーションとケーブル規格

ケーブル規格	通信アプリケーション
ClassD, CAT5, 5e	100BASE-T, Token Ring 100 Mbits/s, PoE+
ClassE, CAT6 (250 MHz)	ATM LAN 1.2 Gbs, 1000 BASE-T
ClassEA, CAT6A (500 MHz)	10GBASE-T, ファイバチャネル 2Gbs,4Gbs
ClassF (600 MHz)	FC-100 GB/s
ClassFA (1000 MHz)	CATV アプリケーション



## ケーブル規格 カテゴリー(TIA)とクラス(ISO)

Cable type	Class A (100 kHz)	Class B (1 MHz)	Class C (16 MHz)	Class D (100 MHz)	Class E (200 MHz)	Class F (600 MHz)	Optical links
Category 3 (symmetrical copper cable)	2 km	500 m	100 m	—	—	—	—
Category 4 (symmetrical copper cable)	3 km	600 m	150 m	—	—	—	—
Category 5 (symmetrical copper cable)	3 km	700 m	160 m	100 m	—	—	—
150Ω (symmetrical copper cable)	3 km	1 km	250 m	150 m	—	—	—
Category 6 (symmetrical copper cable)	—	—	—	—	100 m	—	—
Category 7 (symmetrical copper cable)	—	—	—	—	—	100 m	—
Multimode fiber	—	—	—	—	—	—	2 km
Single-mode fiber	—	—	—	—	—	—	3 km

\* Cat 6AはClass EA(500MHz)となります。



# Cat5/6/6a試験：測定器に求められる条件（測定確度）

ISO/IEC 61935-1より抜粋：

ClassEA(Cat6A相当)ケーブルの試験には測定確度レベルⅢe以上の測定器が必要

5 Field test measurement requirements for electrical properties

5.1 Introduction

This clause applies to field test specifications for post-installation performance measurements of installed cabling designed in accordance with ISO/IEC 11801 (or equivalent).

The information contained in this clause uses the links defined in ISO/IEC 11801 (or equivalent), and specifies parameters for field testers, test methods and interpretations of test results, leading to a practical solution to the issues related to field testing. Classes of twisted pair cabling links referred to herein correspond with those described in ISO/IEC 11801 (or equivalent).

Field test equipment is classified by performance level.

Currently Levels I, II, IIE, III, IIIe and IV are used in the industry.

This clause specifies requirements for field test equipment used to certify class D, E, EA, F and FA cabling as defined in ISO/IEC 11801.

- Level IIE test equipment or better is required to test class D cabling;
- Level III test equipment or better is required to test class E cabling;
- Level IIIe test equipment or better is required to test class EA cabling;
- Level IV test equipment or better is required to test class F and FA cabling.

This clause specifies in detail



# ワイヤーエキスパート WX4500の測定確度

ワイヤーエキスパート WX4500は第三者機関であるIntertek ETLよりLevel IIIe、IV、V(ドラフト)の測定確度を持っている事を認定されています。

   
Intertek

3933 US Route 11  
Cortland, New York 13045 USA  
Phone Number: (800) 345-3851  
Fax Number: (607) 758-8637  
Web: www.intertek.com

**ETL Verified Certificate of Conformance Number: 100657061CRT-001d**

On the basis of the tests undertaken, the sample(s) of the below product have been found to comply with the essential requirements of the referenced specifications at the time the tests were carried out.

Psiber Data Pte Ltd.  
3 Science Park Drive  
#03-09 The Franklin  
Singapore

Verification/Report Number: 100657061CRT-001b  
Product Tested: Field Tester  
Model(s) and or Brand Name: WireXpert  
Standard(s)/Specification: ANSI/TIA-1152 Level IIIe and IEC 61935-1 Levels IIIe and IV with the applicable measurement accuracy  
Product package marking shall include: ETL Verified to ANSI/TIA-1152 Level IIIe and IEC 61935-1 Levels IIIe and IV and the product model(s) and or brand name.  
Continuing compliance to this specification is monitored through production testing, quarterly inspections by Intertek at the production facility and random sample testing.  
Date Verified: 5/16/2012  
Approved By:   
Antoine Pelletier, Engineer

This verification supersedes all previous verifications with the noted Verification/Report number(s) dated before this verification notice.

NOTE: This verification is part of the full test report(s) and should be read in conjunction with it.

This Verification is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to copy or distribute this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results referenced from this Verification are relevant only to the sample tested. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

   
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On the basis of the tests undertaken, the sample(s) of the below product have been found to comply with the essential requirements of the referenced specifications at the time the tests were carried out.

Psiber Data Pte Ltd.  
3 Science Park Drive  
#03-09 The Franklin  
Singapore  
Contact Mr. Harshang Pandya

Verification/Report Number: 100657061CRT-001b  
Product Tested: Field Tester  
Model(s) and or Brand Name: WireXpert (Software 5.1 needed for Level V)  
Standard(s)/Specification: ANSI/TIA-1152 Level IIIe, IEC 61935-1 Levels IIIe & IV and currently proposed Level V draft with the applicable measurement accuracy  
Product package marking shall include: ETL Verified to ANSI/TIA-1152 Level IIIe, IEC 61935-1 Levels IIIe & IV and currently proposed Level V draft and the product model(s) and or brand name.  
Continuing compliance to this specification is monitored through production testing, on-going inspections by Intertek at the production facility and random sample testing.  
Date Verified: 5/16/2012 Date Revised: 8/25/2013  
Approved By:   
Antoine Pelletier, Engineer

This verification supersedes all previous verifications with the noted Verification/Report number(s) dated before this verification notice.

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