

T ELENOR **N** ETT **S** PECIFICATION

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Access to dark fibre. Specification of the network side of the user-network interface.

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1 Scope

This specification describes the connector and fibre cable and characteristics for the dark fibre provided by Telenor.

In no event shall Telenor be liable to other parties for any direct, indirect, special, incidental, or consequential damages resulting from errors or defects in these specifications.

2 References

2.1 Normative references

Ref.No.	Specification	Title	Edition/ Issue
[1]	I-ETS 300 671	Transmission and Multiplexing™; Passive optical components; Fibre optical connectors for single-mode optical fibre communication systems; Common requirements and conformance testing.	Nov. 1996
[2]	CECC 86 115-803	Detail Specification: Connector sets of assessed quality for optical fibres and cables Type FC-PC tuned	Nov. 1997
[3]	ITU-T Recommendation G.652	Characteristics of a single-mode optical fibre cable	April 1997

3 Definitions and abbreviations

Patch-cord: Single-fibre cable with a connector in each end. The connectors in each end, can be of different type.

Pig-tail: Single-fibre cable with a connector in one end.

4 Connector FC/PC

4.1 Construction

The construction and size dimensions of the following connector sets are in accordance with:

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TYPE	Specification
FC/PC:	CECC 86 115-803 [2]

The adaptors are in accordance with:

TYPE	Specification	Clause /figure
FC/PC	CECC 86 115 - 803 [2]	Figure 6 variant B 03

The ferrule endface shape and geometry – after termination are in accordance with:

TYPE	Specification	Clause /figure
FC/PC	CECC 86 115 - 803 [2]	Figure 3

4.2 Performance

The performance of the connector set, pigtail and patch-cord is in accordance with I-ETS 300 671 [1].

The performance will be according to one of the following classes:

Class	Attenuation grade	Attenuation	Return loss grade	Return loss
PT	P	Mean $\leq 0,35$ ¹⁾	T	≥ 35 dB ³⁾
PU	P	Mean $\leq 0,35$ ¹⁾	U	≥ 50 dB ³⁾
PV	P	Mean $\leq 0,35$ ¹⁾	V	≥ 55 dB ³⁾
QT	Q	Mean $\leq 0,30$ ²⁾	T	≥ 35 dB ³⁾
QU	Q	Mean $\leq 0,30$ ²⁾	U	≥ 50 dB ³⁾
QV	Q	Mean $\leq 0,30$ ²⁾	V	≥ 55 dB ⁴⁾

¹⁾ Mean $\leq 0,35$ 1,0 dB maximum for ≥ 97 % of mating combinations

²⁾ Mean $\leq 0,30$ 0,60 dB maximum for ≥ 99 % of mating combinations

³⁾ As measured when mated

⁴⁾ As measured when mated and unmated

Discrepancy

Some connectors installed in the Telenor network before 1989 was of type FC and has not a PC polished endface. The performance of this type will typically be:

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Attenuation	Return loss
Mean \leq 1 dB	\geq 12 dB

5 Fibre cable

5.1 Performance

Fibre cable and fibre performance parameters for transmission in the 1310 nm and the 1550 nm windows are given in ITU-T specification G-652 [3] .

Note: For older cables installed before medio 1988 operation can only be guaranteed in the 1310 nm window.

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