

Application cabling lengths

The maximum supportable lengths in this annex are application and media dependent.

See below table in ANSI/TIA-568-C.0 for balanced twisted pair applications and table 7 in ANSI/TIA-568- C.0 for optical fiber applications.

T-1, E-1, T-3 and E-3 circuit lengths

Below table provides the maximum circuit lengths for T-1, T-3, E-1, and E-3 circuits with no adjustments for intermediate connections or outlets between the circuit demarcation point and the end equipment.

These calculations assume that there is no customer DSX panel between the access provider demarcation point (which may be a DSX) and the end equipment.

The access provider DSX panel is not counted in determining maximum circuit lengths.

Circuit type	Category 3	Category 5e,6 &6A	734 Type Coaxial	735 Type coaxial
T-1	159m (520 ft.)	193 m(632ft)		
CEPT-1 (E-1)	116m (380 ft.)	146m (477 ft.)	332m (1088 ft.)	148m (487 ft.)
T-3	-	-	146m (480 ft.)	75m (246 ft.)
CEPT-3 (E-3)	-	-	160m (524 ft.)	82m (268 ft.)

Repeaters can be used to extend circuits beyond the lengths specified above.

These circuit lengths should be adjusted for insertion- losses caused by a DSX panel between the access provider demarcation point (which may be a DSX panel) and the end equipment.

Maximum circuit lengths should be adjusted for insertion losses caused by intermediate connections and outlets.

Data center should have three connections in the backbone cabling, three connections in the horizontal cabling and no DSX panels between the access provider demarcation point and the end equipment.

Backbone cabling:

- one connection in the entrance room;
- Two connections in the main cross-connect;
- No intermediate cross-connect.
- Horizontal cabling:
 - two connections in the horizontal cross-connect;
 - An outlet connection at the equipment distribution area.

This “typical” configuration corresponds to the typical data center with an entrance room, main distribution area (MDA), one or more horizontal distribution areas (HDAs), and no zone distribution areas. Maximum circuit lengths for a typical data center configuration with six connections. These maximum circuit lengths should include backbone cabling, horizontal cabling, and all patch cords or jumpers between the access provider demarcation point and the end equipment.

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