

RDS Site Products Overview

Description

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Contents

1	Introduction	1
1.1	Radio Dot Interface Overview	1
2	RDI Patch Cables and Installation Material	3
3	RDI Feeder Cables	5
4	RDI Jumper Cables and Installation Material	6
5	Y-Splitter	7
6	Distributed IRU	8
7	Generic Installation Material and Tools	10
7.1	Cable Routing	10
7.2	Tools	12





1 Introduction

This document describes global recommended installation products and cables for Ericsson Radio Dot System (RDS).

For information on recommended North American installation products, see *North American RDI Cabling Requirements*.

1.1 Radio Dot Interface Overview

The RDI is all cables and connectors between the Indoor Radio Unit (IRU) and the Radio Dot (RD).

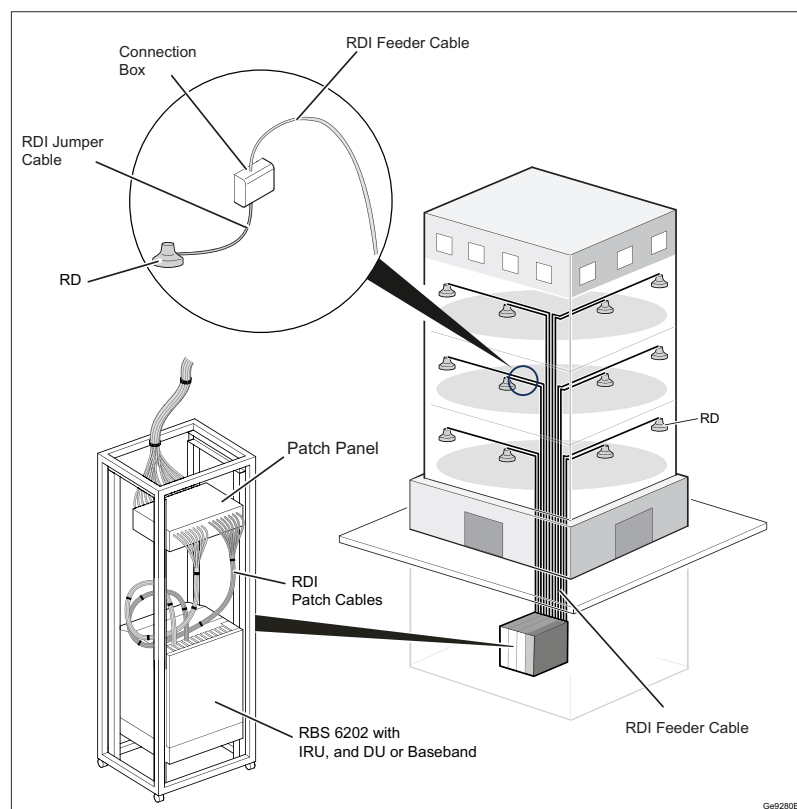


Figure 1 RDI Overview (Example Configuration)

The RDI can be divided into three parts:

- RDI patch cables - cables between IRU and patch panel. [RDI Patch Cables and Installation Material](#) on page 3.
- RDI feeder cables - RDI permanent link. [RDI Feeder Cables](#) on page 5



- RDI jumper cables - cables between RD and connection box. [*RDI Jumper Cables and Installation Material*](#) on page 6



2 RDI Patch Cables and Installation Material

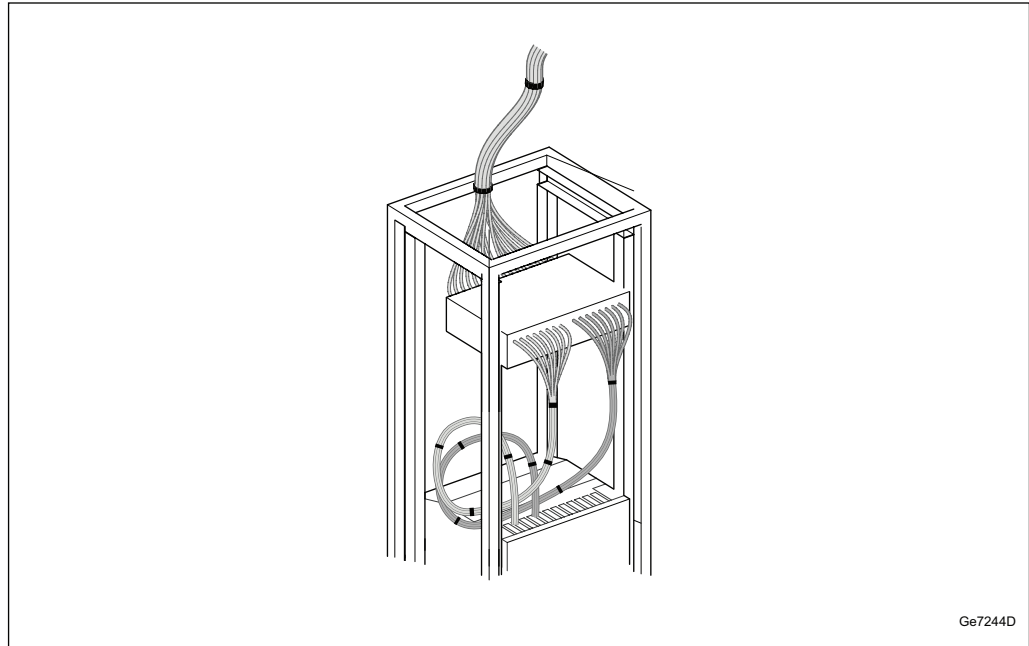


Figure 2 RDI Patch Cable (IRU to Patch Panel)
Cables and installation material close to the IRU.

Table 1 RBS Installation Material (RBS 6202)

Product	Product Number	Dimensions	Notes
19-inch Rack, floor mounted	SEB 110 91/1	2000 × 600 × 600 mm Width: 19-inch	Flexible 19-inch racks for installation of RBS 6202 (including IRU) and patch panels. For equipment up to 150 kg.
Grounding kit	RPM 119 1934/1	400 mm	Grounding kit for 19-inch racks.
Cage nuts, M6 50 pcs	NTB 101 321/1	-	Cage nuts for equipment installation in 19-inch racks.

Table 2 19-inch Patch Panels

Product	Product Number	Dimensions	Notes
Patch panel, 24 ports	BGK 901 55/1	Width: 19-inch	Patch panel for connection of up to 24 RDs

**Table 3** *IRU Patch Cables*

Product	Product Number	L (m)	Notes	Connectors
Patch cord (IRU Patch Cables)	TSR 899 234/2000 TSR 899 234/5000 TSR 899 234/10M	2 m 5 m 10 m	Connects IRU to the Radio Dot Feeder cables, through the patch panel (BGK 901 55/1) and connector (RNV 899 212/x)	RJ-45 (m) to RJ-45 (m)



3 RDI Feeder Cables

Cables and connector for the RDI feeder (RDI permanent link).

Table 4 *Radio Dot Feeder Cables*

Product	Product Number	L (m)	Notes	Connectors
CAT 6 _A , LSZH ⁽¹⁾	TFL 901 50/500M	500 m	TP cable CAT 6 _A , F/FTP	Open-end to open-end
CAT 6 _A , LSFRZH ⁽²⁾	TFL 901 51/500M	500 m	TP cable CAT 6 _A , F/FTP	Open-end to open-end

(1) Low Smoke, Zero Halogen (LSZH)

(2) Low Smoke, Fire Retardant, Zero Halogen (LSFRZH)

Table 5 *Radio Dot Feeder Connectors*

Product	Product Number	Pcs	Notes	Connectors
RJ-45 connector (female)	RNV 899 212/2 RNV 899 212/3	12 96	RJ-45 female connector, CAT 6A shielded. For installations with patch panel and connection box. Attached to Radio Dot Feeder cable in field.	RJ-45 (f)
RJ-45 connector (male)	RPV 899 153/1	10	RJ-45 male connector, CAT 6A shielded. For installations without connection box and patch cord (RD jumper cable). Attached to Radio Dot Feeder cable in field.	RJ-45 (m)

4 RDI Jumper Cables and Installation Material

Cables and installation material close to the RD.

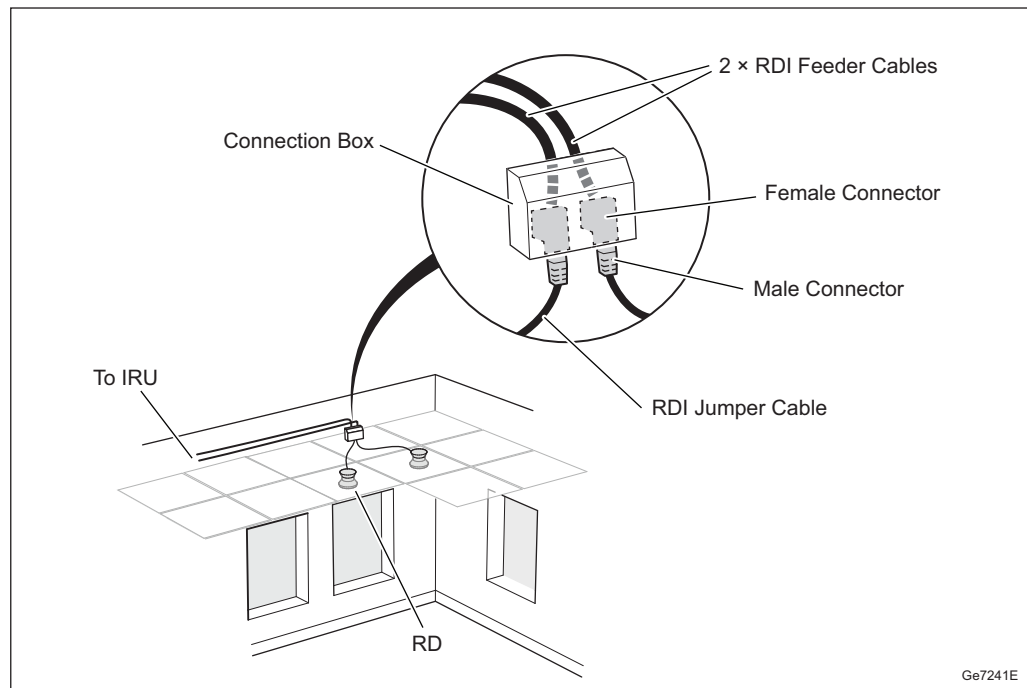


Figure 3 RDI Jumper Cable (RD to Connection Box)

Table 6 Radio Dot Connection Box

Product	Product Number	Dimensions	Notes
Connection box	BGK 901 56/1	93 mm × 32 mm × 69 mm	For connection of two RDI jumper cables to RDI feeder cables.

Table 7 RD Jumper Cables

Product	Product Number	L (m)	Notes	Connectors
Patch cord (RD jumper cable)	TSR 899 234/2000 TSR 899 234/5000 TSR 899 234/10M	2 m 5 m 10 m	Connects RD to the Radio Dot Feeder cables, through the connection box (BGK 901 56/1) and connector (RNV 899 212/x).	RJ-45 (m) to RJ-45 (m)

5 Y-Splitter

The Y-splitter enables the connection of two RDs to one RDI feeder cable.

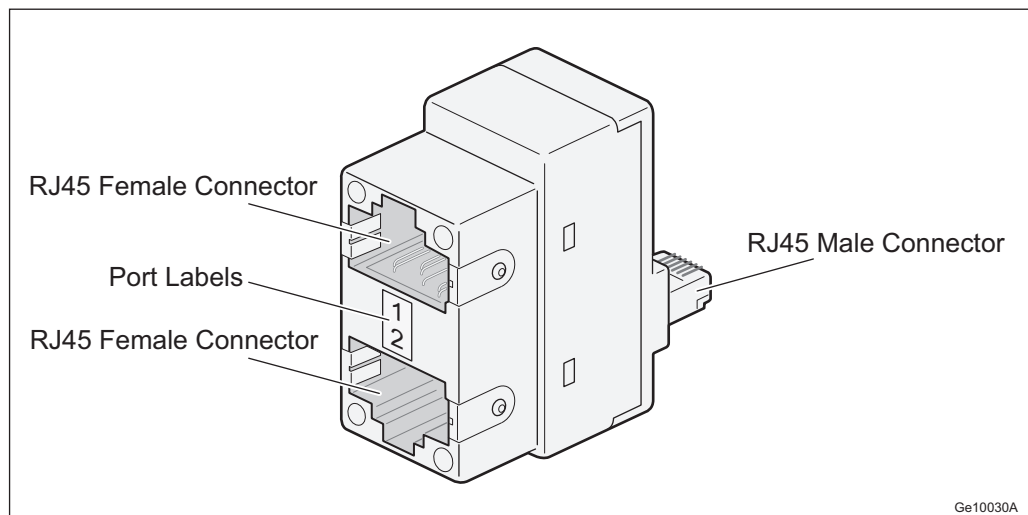


Figure 4 Y-Splitter

Table 8 Y-Splitter

Product	Product Number	Quantity	Notes	Connectors
Y-Splitter ⁽¹⁾	NTB 101 828/1	8	Includes 8 Y-splitters and 4 ferrites. Attached to the RJ-45 female connector at each end of the RDI feeder cable.	2 x RJ-45 (f) + 1 x RJ-45 (m)
Y-Splitter + Ferrite ⁽¹⁾	NTB 101 0046/1	1	Includes one Y-splitter and one ferrite.	2 x RJ-45 (f) + 1 x RJ-45 (m)

⁽¹⁾ The Y-splitter is available in the Radio Dot System product package.

6 Distributed IRU

Cables and installation material related to distributed IRU.

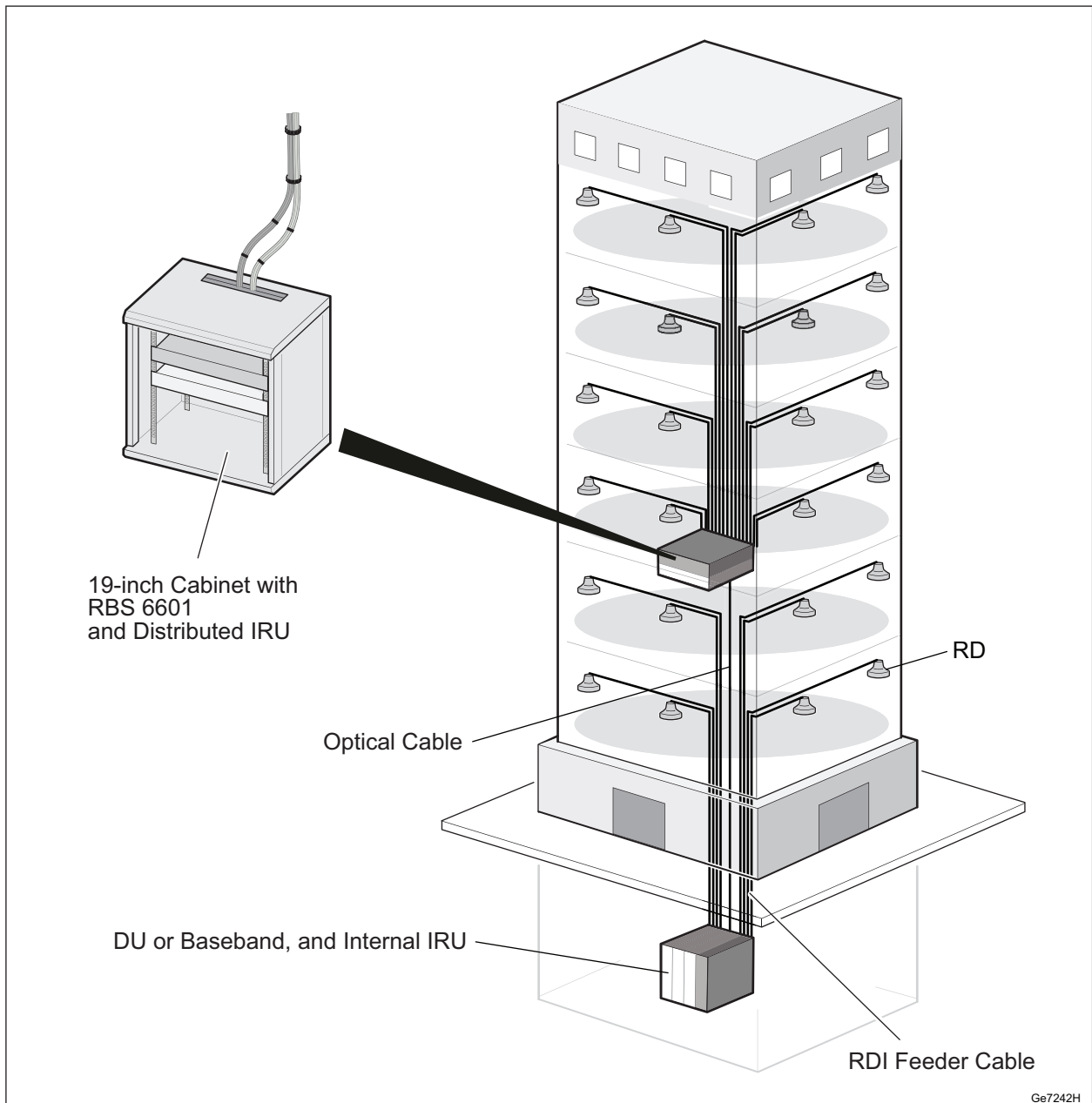


Figure 5 RDI with Distributed IRU (Example Configuration)



Table 9 DU or Baseband to IRU Optical Cables and SFP Modules

Product	Product Number	Notes	Connectors
Optical Cable	RPM 253 3512/50M RPM 253 3512/70M RPM 253 3512/100M	For connection between DU or Baseband and distributed IRU. 2 Fiber, for connection to one IRU.	Connectors included in the cable, LCD - LCD SM
Optical Cable	RPM 253 3038/45M RPM 253 3038/75M RPM 253 3038/100M	For connection between DU or Baseband and distributed IRU. 4 Fiber, for connection to two IRUs.	Connectors included in the cable, 4 x LC - 4 x LC SM
SFP Module ⁽¹⁾	RDH 102 47/2	SFP Module, SM	-
SFP Module ⁽¹⁾	RDH 102 65/2	SFP Module, SM For connecting DU or Baseband with distributed IRU, if cascading to one more IRU.	-

(1) For detailed technical information on the SFP module, see SFP Module Selector Guide.

Table 10 RD Installation Material

Product	Product Number	Notes
19-inch Cabinet	SDC 901 538/1	19-inch rack, 12 U Houses Support System 6601 with IRU and patch panel. Wall mounted Maximum 60 kg load
Cable Winder Box	NTM 201 3729/1	Holds excess optical cable up to 30 m. Including fastening material

Table 11 19-inch Fan

Product	Product Number	Notes
Fan DC 48 V	BKV 106 187/1	Fan for 19-inch rack DC 48 V. Used with RBS 6601 with IRU. Rack mounted Comes as a ready-to-install kit.
Fan AC 230V	BKV 106 187/2	Fan for 19-inch rack AC 230 V. Used with RBS 6601 with IRU. Rack mounted Comes as a ready-to-install kit.

7 Generic Installation Material and Tools

7.1 Cable Routing

Cable runs and cable trays are used to hide and protect installed cables. The kits are available for a number different installation scenarios.

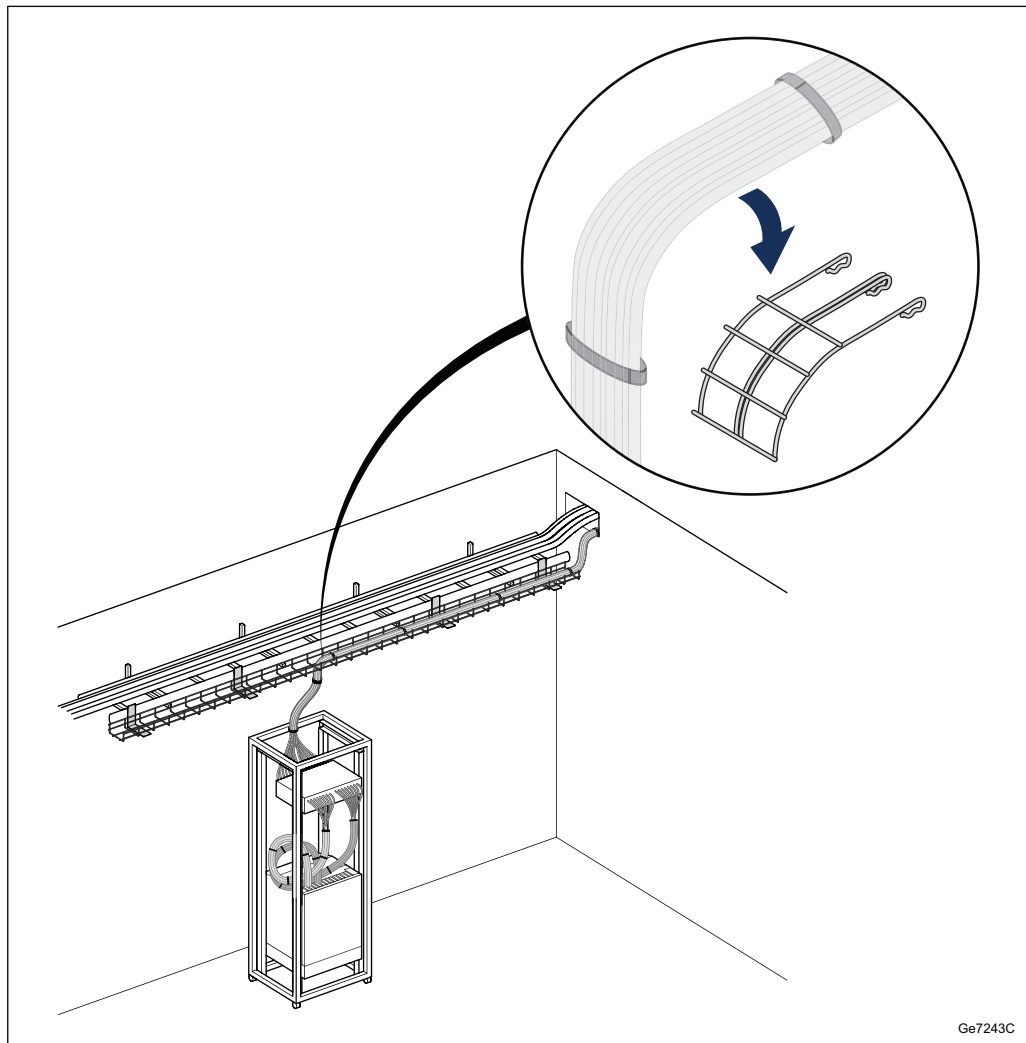


Figure 6 Cable Installation

Table 12 Cable Routing and Cable Runs

Product	Product Number	Dimensions	Notes
Indoor Cable Tray	NTM 201 3730/1	Length: 2 m (×2 pcs) Width and Height: 40 × 25 mm	Cable protection trays for indoor installation on walls or in cable ladders. Including two 2-meter



Product	Product Number	Dimensions	Notes
			trays and fastening material. White.
Mini Tray on Roll	MPB 901 026/1	Length: 20 m Width and Height: 30 × 30 mm	Adhesive cable protection tray supplied on rolls for easy installation. Ideal for a few numbers of cables. White.
Plastic Trunking Kit	NTM 201 4153/1	Length: 2 m (×6 pcs) Width and Height: 90 × 61 mm	Wall mounted cable protection tray with cover for commercial installations. Including six 2-meter trays, accessories for T-joints and L-joints, end caps, and covers. White.
Wire suspension kit	SXK 107 2850/1 SXK 107 2851/1 SXK 107 2852/1	Wire Length: 25 m Wire Length: 50 m Wire Length: 100 m	Steel wire that cables are strapped to. For installation of long cables in for example suspended ceilings and garages. Including fastening material. Excluding tie straps.
Generic Installation Material	7/NTM 201 201	-	Kit with installation material, such as tie straps, screws, plugs, and tape.
Velcro tie straps	SET 133 080/1	20 mm × 10 m	Velcro tie straps. Cut to desired length in field.
Cable tie kit, 100 pcs	SET 133 066/1	-	Plastic cable ties
Cable tie	SET 145 064/230	-	Steel cable ties, 230 mm
Cable tie	SET 145 095/457	-	Steel cable ties, 457 mm
Indoor Cable Ladder	NTM 201 3160/2	Length: 2.25 m (×2 pcs)	Cable ladder for indoor installation. Carries several different cables. Flexible installation with possibility to adjust horizontally and vertically. Including accessories for T-joint, L-joint and straight joint.
Mesh Tray Set	NTM 201 4151/1	Length: 2.5 m Width: 75 mm	Cable run for indoor installation.
Cable Tray with cover	SXK 107 2023/1	Length: 2 m (×2 pcs)	Cable tray for cables in shelter and RBS room. Cables are fixed with cable ties. Including cover.
Cable Tray Fitting Profile W=50 mm, L=2000 mm	NTM 201 4152/1	Length: 2 m Width: 50 mm	Cable tray for cables in shelter and RBS room. Cables are fixed with cable ties.
Slitted cable tube	NTM 201 3929/1	Length: 2 m (×5 pcs) Diameter: 23 mm	Plastic tube for routing and protection of outdoor cables. Can be opened for routing of terminated cables and expansions. Houses for example three optical cables and three power cables to RRUs.
Slitted cable tube	NTM 201 3929/2	Length: 2 m (×5 pcs) Diameter: 44 mm	Plastic tube for routing and protection of outdoor cables. Can be opened for routing of terminated cables and expansions. Houses for example six optical cables and six power cables to RRUs.



7.2 Tools

Table 13 Tools

Product	Product Number	Dimensions	Notes
Preparation Tool	LDK 901 44/1	–	For preparation of RDI feeder cables before termination with RJ45 female connectors.