



<http://wiki.homerecz.com>

..... 1

..... 1

..... 1

..... 1

..... 5

Category 5

CAT1 6

CAT2 6

CAT3 7

CAT4 8

CAT5 8

CAT5e 9

CAT6 10

CAT6a 10

CAT7 11

CAT7a 12

CAT8 12

CAT8.1 12

CAT8.2 13

, 13

..... 14

..... 15

..... 15

..... 15

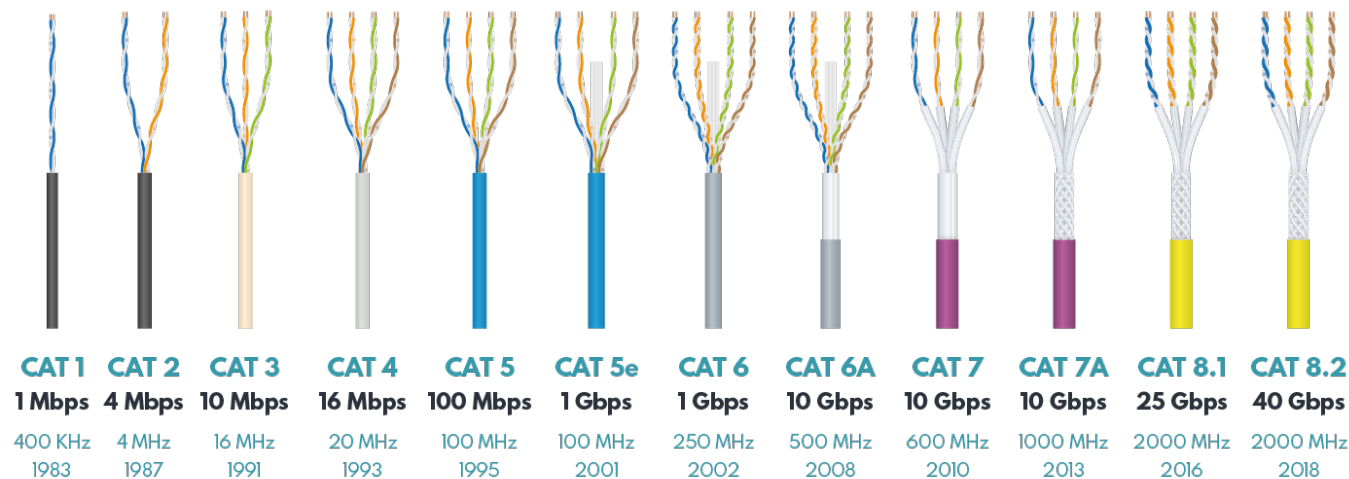
..... 15

LAN(Local Area Network)



Category

History of Ethernet LAN Cables' Categories



All Rights Reserved, Samm Teknoloji / telecom.samm.com / telecom@samm.com

Category	Max. Data Rate	Bandwidth	Max. Distance	Usage
CAT1	1 Mbps	0.4 MHz		Telephone and modem lines
CAT2	4 Mbps	4 MHz		LocalTalk & Telephone
CAT3	10 Mbps	16 MHz	100 m (328 ft.)	10BaseT Ethernet
CAT4	16 Mbps	20 MHz	100 m (328 ft.)	Token Ring
CAT5	100 Mbps	100 MHz	100 m (328 ft.)	100BaseT Ethernet
CAT5e	1 Gbps	100 MHz	100 m (328 ft.)	100BaseT Ethernet, residential homes
CAT6	1 Gbps	250 MHz	100 m (328 ft.), 10Gb at 37 m (121 ft.)	Gigabit Ethernet, commercial buildings
CAT6a	10 Gbps	500 MHz	100 m (328 ft.)	Gigabit Ethernet in data centers and commercial buildings
CAT7	10 Gbps	600 MHz	100 m (328 ft.)	10 Gbps Core Infrastructure
CAT7a	10 Gbps	1000 MHz	100 m (328 ft.), 40Gb at 50 m (164 ft.)	10 Gbps Core Infrastructure
CAT8	25 Gbps (CAT8.1), 40 Gbps (CAT8.2)	2000 MHz	30 m (98 ft.)	25 Gbps/40 Gbps Core Infrastructure

CAT1

UTP(Unshielded Twisted Pair)가가

Category 1 Ethernet LAN Cables

1983 - 128~1000 Kbps

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com

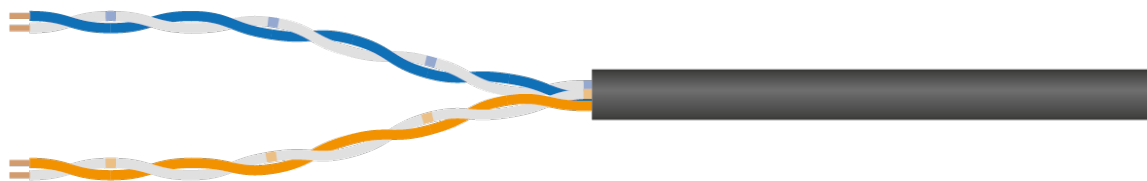


CAT2

2가1980IBM
. 4Mbps

Category 2 Ethernet LAN Cables

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com

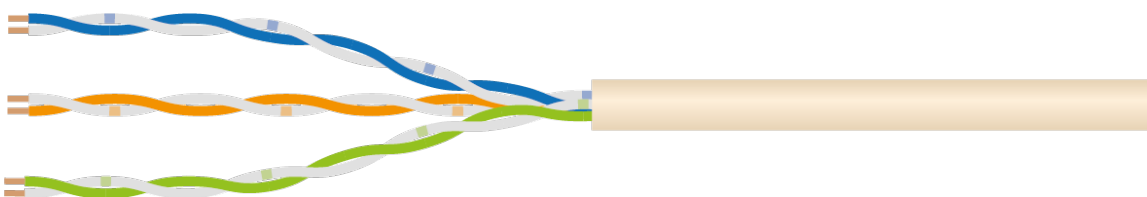


CAT3

1990	3	4	가
10BaseT		.	
10Mbps			.

Category 3 Ethernet LAN Cables

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com



CAT4

CAT3

가

4

가

IBM

.

16Mbps

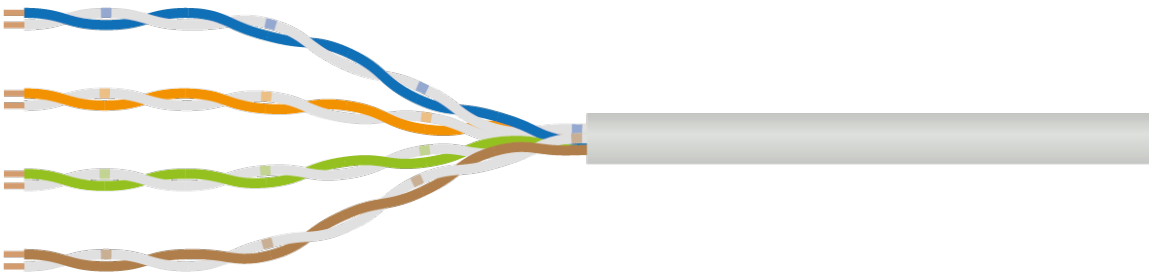
Category 4

Ethernet LAN Cables

1993 - 16 Mbps

All Rights Reserved, Samm Teknoloji

telecom.samm.com / telecom@samm.com



20

MHz

RJ-45

CAT5

1995

5

100Mbps

.

10BaseT

100BaseT()

100

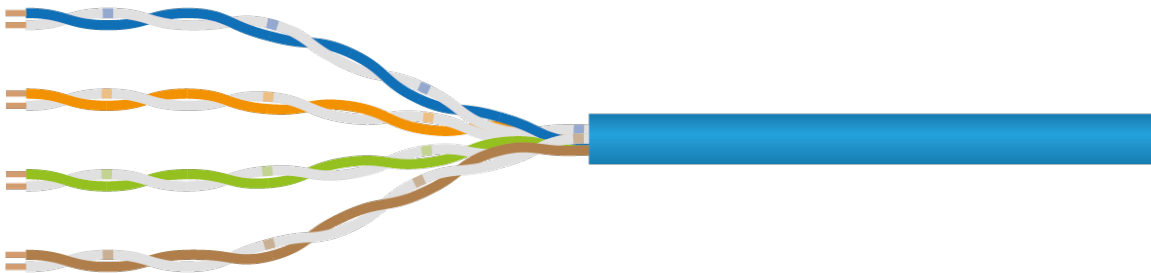
(328)

,

Category 5 Ethernet LAN Cables

1995 - 100 Mbps

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com



100 MHz



CAT5e

CAT5e

1Gbps

Cat5

. Cat5e

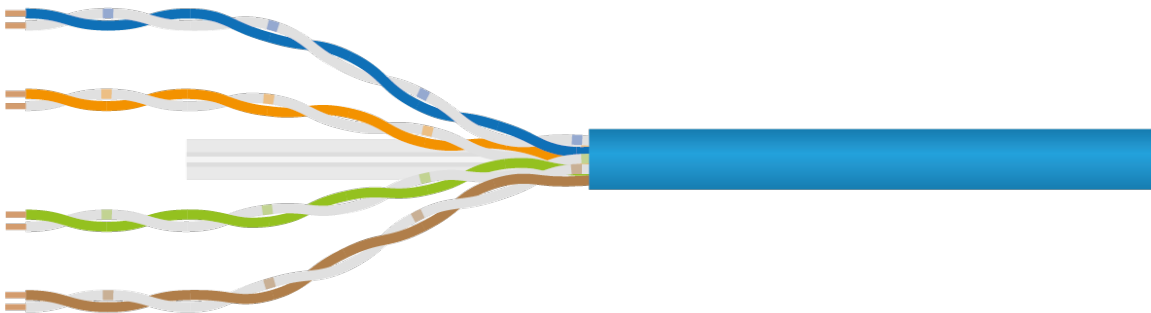
가

.

Category 5E Ethernet LAN Cables

2001 - 1000 Mbps / 1 Gbps

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com



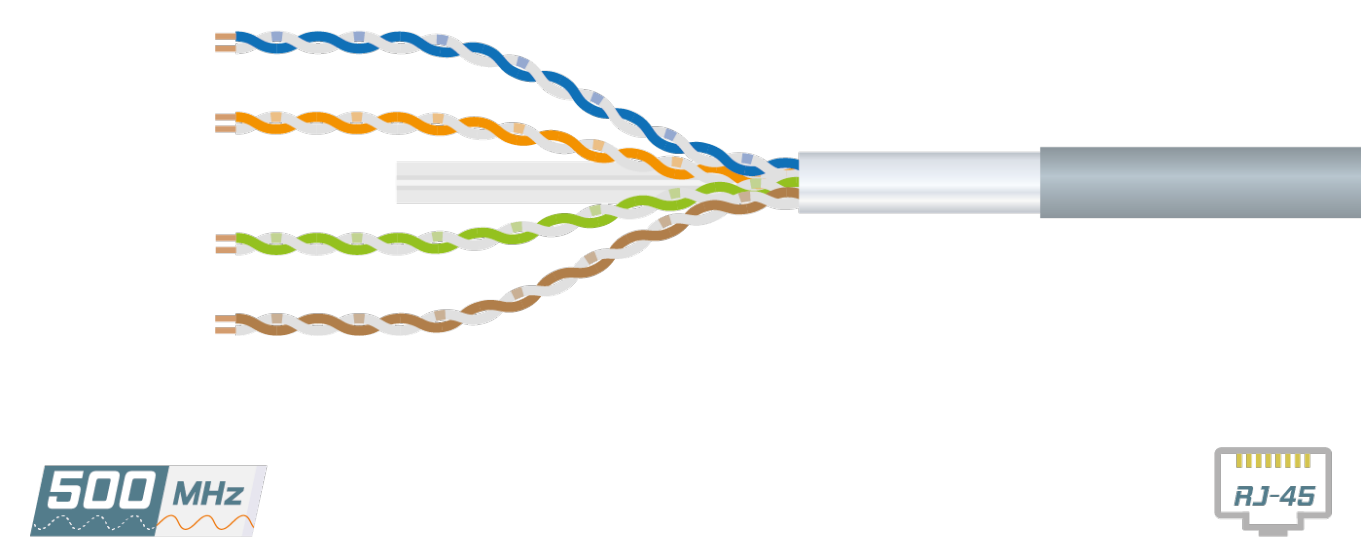
100 MHz



Category 6A Ethernet LAN Cables

2008 - 10 Gbps

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com



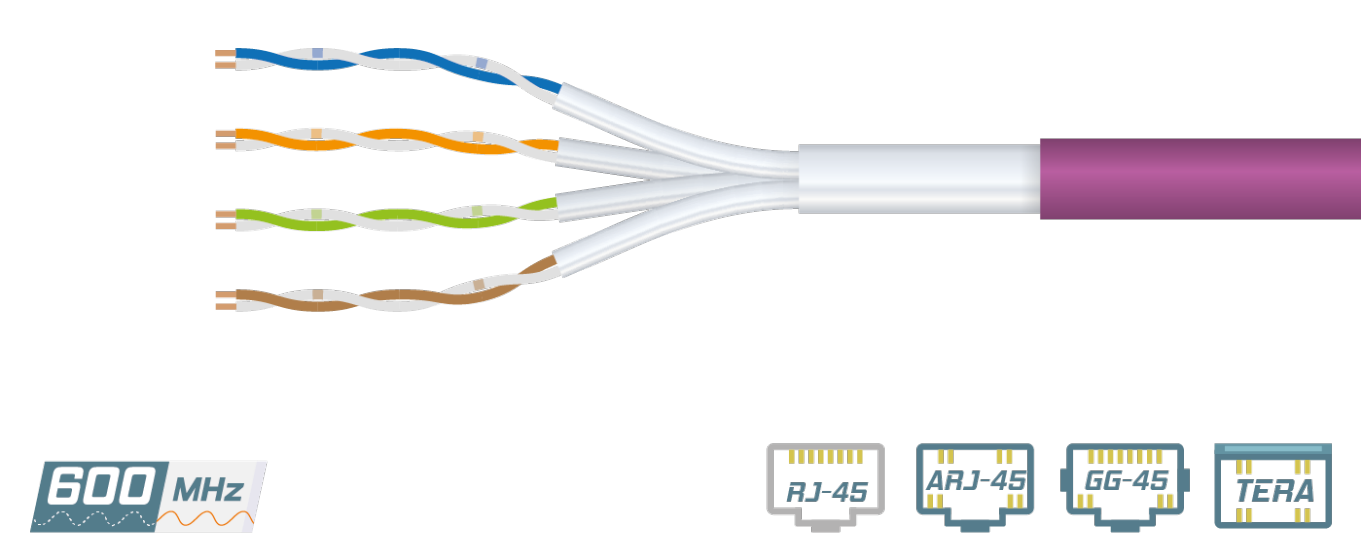
CAT7

CAT7			IEEE	TIA/EIA	
CAT6a			CAT7	GG45	
		. CAT7a (Category 7 Augmented)	CAT7		50
가	15	100Gbps	. CAT7	CAT7a	40
		CAT7/CAT7a	가		IEEE EIA

Category 7 Ethernet LAN Cables

2010 - 10 Gbps

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com

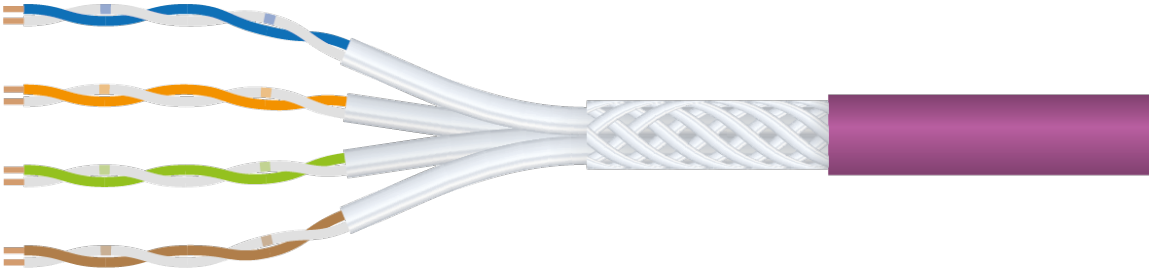


CAT7a

Category 7A Ethernet LAN Cables

2013 - 10 Gbps

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com



1000 MHz



CAT8

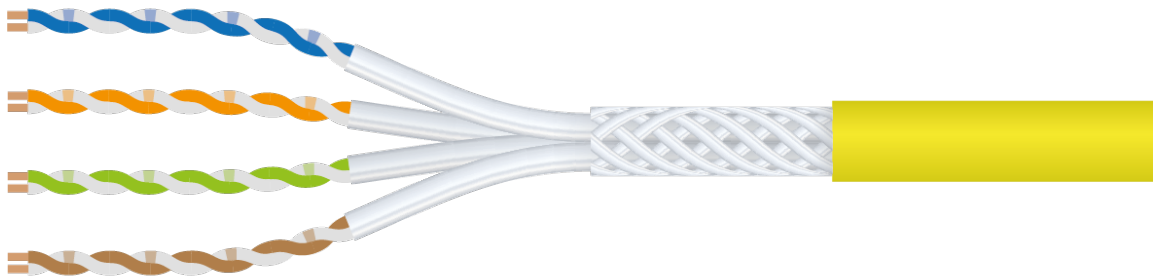
30	2GHz(2000MHz)	40Gbs	CAT8
25GBase T	40GBase T		
	가		
		RJ45	

CAT8.1

Category 8.1 Ethernet LAN Cables

2016 - 25 Gbps

All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com



2000 MHz

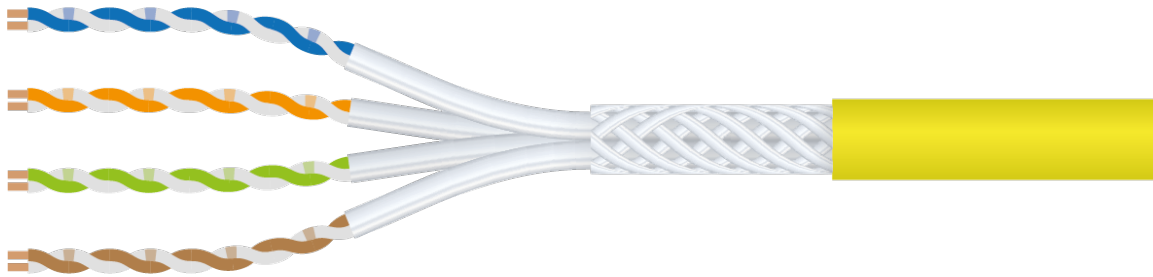


CAT8.2

Category 8.2 Ethernet LAN Cables

2018 - 40 Gbps

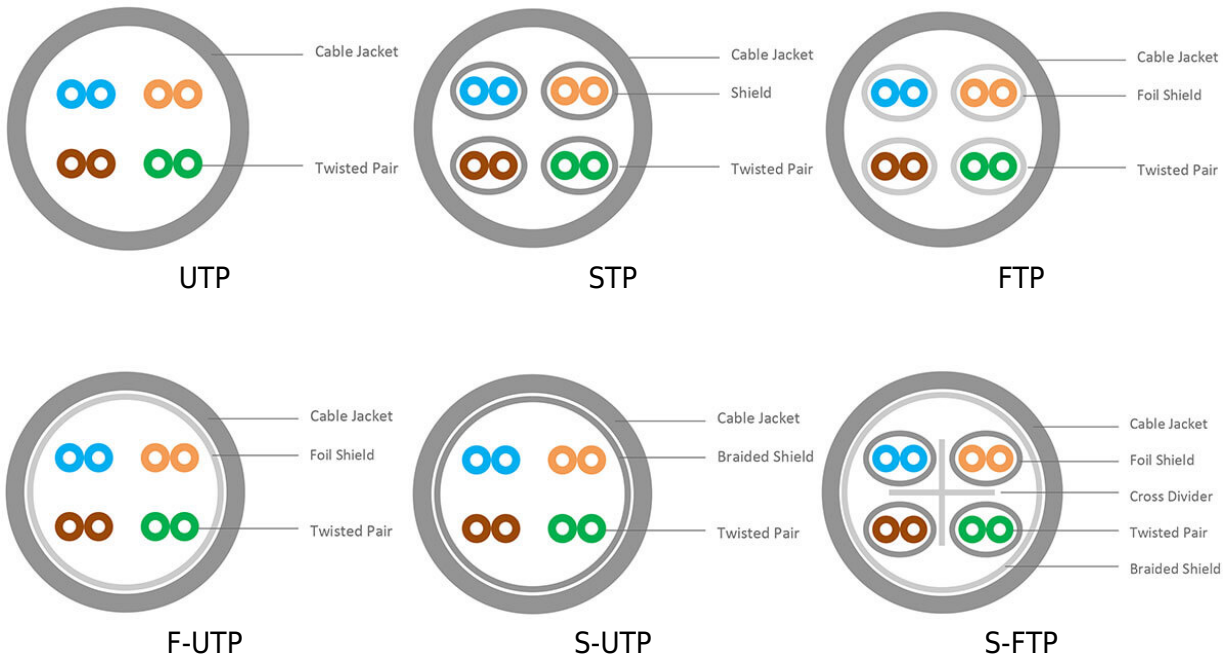
All Rights Reserved, Samm Teknoloji
telecom.samm.com / telecom@samm.com



2000 MHz



,



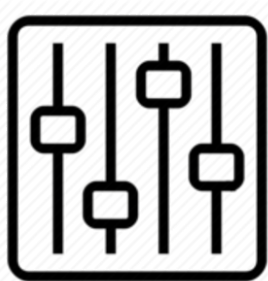
가

가

- UTP : **Un**shielded **T**wisted **P**air, ().
- FTP : **F**oiled **T**wisted **P**air, ().
- S-UTP : **S**hielded - **U**nshielded **T**wisted **P**air, .
- S-FTP : **S**hielded - **F**oiled **T**wisted **P**air, .

<https://telecom.samm.com/categories-of-ethernet-lan-cables-cat1-cat2-cat3-cat4-cat5-cat5e-cat6-cat6a-cat7-cat7a-cat8>

- [Facebook](#)
- [Twitter](#)
- [Email](#)



<http://wiki.homerecz.com>

From:
<https://wiki.homerecz.com/> -

Last update: **2024/03/07**

: (admin@homerecz.com)