

Telco Hydra Panel 24xRJ45Jack/ 1xTelco 45° Male shielded, 1U, Length: xxxx in cm



## tde - TP cable assemblies

The tde patch and trunk cables are manufactured completely at the German facility in Ohrte. Production processes at tde meet the latest standards. The patch cables and trunk cables are manufactured in many different configurations using highly automated processes. The range of products on offer encompasses the entire spectrum of connector types available on the market. To guarantee consistently top quality, only the best components from renowned vendors are used. All tde production staff have the necessary qualifications and education, and have been well trained in using specialist technical equipment.

Each cable application is subjected to a full test procedure and a final visual inspection to ensure that only 100% error-free products are shipped to the customer.

Products made by tde perform at least internationally accepted quality standards and norms. The quality management system is ISO 9001, ISO 14001 and TL9000 certified.



**tde<sup>®</sup> trans data elektronik GmbH**

**Headquarter address:**

Lingener Str. 2  
D-49626 Bippen/Ohrte  
Tel.: +49 5435 9511 0  
Fax.: +49 5435 9511 32

**Sales office address:**

Prinz-Friedrich-Karl-Str. 46  
D-44135 Dortmund  
Tel.: +49 231 914 36 99  
Fax.: +49 231 914 31 29

info@tde.de | www.tde.de

Telco Hydra Panel 24xRJ45Jack/ 1xTelco 45° Male shielded, 1U, Length: xxxx in cm

## Technical Data

Application	Cisco VG-Series Analog Gateways
Entry	1x Telco (RJ21) Male, shielded
Exit	24x RJ45 Jack, shielded
Length	xxxx in cm

## TP Patch Panels

Type	RJ45 Jack, shielded
Number of Ports	24
Color	Light Gray (RAL 7035)
Dimensions	19"/1U

## Connectors

Type	Telco (RJ21) Male, shielded
Number of poles	50
Cable outlet	45° (skewed)
Cover	Full metal
Termination technique	Insulation displacement
Mounting	screw locking
Manufacturer	tde/TE

## TP Cable

### Construction

Conductor	bare copper wire, Ø 0.51 mm (AWG24/1)
Insulation	PE, Ø 1.1 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Screen	Al-laminated plastic foil and Copper braid, tinned
Sheath	LSHF (FRNC, LSOH), grey RAL 7035

### Mechanical properties

Minimum bending radius	Without load	≥ 25 mm
	With load	≥ 50 mm
Temperature range	During operation	-20°C up to +60°C
	During installation	0°C up to +50°C

Telco Hydra Panel 24xRJ45Jack/ 1xTelco 45° Male shielded, 1U, Length: xxxx in cm

## Electrical properties at 20°C

Loop resistance		≤ 190 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩ*km
Mutual capacitance	at 800 Hz	Nom. 48 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Mean characteristic impedance	100 MHz	100 ± 5 Ω
Nominal velocity of propagation		ca. 67%
Propagation delay		≤ 535 ns/100 m
Delay skew		≤ 20 ns/100 m
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer impedance	at 1 MHz	12 mΩ /m
	at 10 MHz	10 mΩ /m
	at 30 MHz	30 mΩ /m
Coupling attenuation		80 dB
Segregation classification acc. EN 50174-2		"d"

## Electrical Data (nominal) acc. to Cat.7 (at 20°C)

F	Attenuation	NEXT	PS-NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT	Return loss
MHZ	dB/100m	dB	dB	dB/100m	dB/100m	dB/100m	dB/100m	dB
1.0	1.9	71	68	69.1	66.1	68	65	20
4.0	3.7	62	59	58.3	55.3	56	53	23
10.0	6.0	56	53	50.0	47.0	48	45	25
16.0	7.6	53	50	45.4	42.5	44	41	25
20.0	8.5	51	48	42.5	39.5	42	39	25
31.2	10.7	49	46	38.3	35.3	38	35	24
62.5	15.7	44	41	28.3	25.3	32	29	22
100.0	19.8	41	38	21.2	18.2	28	25	20
125.0	22.3	40	37	17.7	14.7	26	23	19
155.5	24.2	38	35	13.8	10.8	24	21	
175.0	25.7	37	34	11.3	8.3	23	20	
200.0	27.5	36	33	8.5	5.5	22	19	
250.0	29.2	35	32	5.8	2.8	20	17	
300.0	32.0	34	31	2.0	-1.0	16	13	

Outerdiameter	6.4 mm
Fire load	433 MJ/km
	0.120 kWh/m
Weight	47 kg/km
Copper content	27
Tensile force	120 N

Telco Hydra Panel 24xRJ45Jack/ 1xTelco 45° Male shielded, 1U, Length: xxxx in cm

## Product variants & accessories

Art.-No.	Description
VG-HP-45J-xxxx	Telco Hydra Panel 24xRJ45Jack/ 1xTelco 45° Male shielded, 1U, Length: xxxx in cm