Telegärtner

FLEXIBLE.
SIMPLE.
SMALL.

HD³-ES: The all-rounder of the modular patch panels.

SPACE–OPTIMIZATION MADE EASY AND SAFE.

Not only in telecommunication / equipment rooms and micro data centers, but also in large server rooms rackspace is limited. Cost pressure and a lack of space usually set narrow limits for a reliable passive IT infrastructure. The requirements are clear: **Scalability**, **flexibility** and **efficiency**.

The Telegärtner HD³-ES is the first choice for these requirements.
It combines the unique features of the Telegärtner HD³ philosophy – **High Density**, **High Durability**, **High Diversity** – with the clear focus on simplicity, operational safety and customer benefits.

„ES", like being focused on the **ES**sential. The fiber optic adaptors for example have integrated, automatic shutters to protect personnel and equipment from laser light. The tool-free assembly simplifies the installation of the modules and the cable management. And the large cable management bar on the rear facilitates proper and safe cable routing. The perfect interaction of all components of the new HD³-ES series create a robust, reliable and scalable platform for the economic fiber and twisted pair expansion of your IT infrastructure. Today and tomorrow.

Tool-free mountable cable management bar
with label holders, bendradius support on the sides and detachable cable guides

Features and Benefits:

- Modules for individual mix-up of fiber and twisted pair technology as the best base for your scalable and economic IT infrastructure
- 19" chassis of 0.5, 1 and 3 U can be installed in recessed positions
- Conductive surface of chassis and modules for improved bonding
- Row of bonding connections
- Multi-purpose rail for easy cable routing, strain relief and installation of mounting brackets
- Easy and quick change of modules
- Fiber modules for breakout/mini-breakout and for pre-terminated cables, with integrated splice cassette or FanOut modules with MPO/ MTP® connectors
- Up to 48 RJ45 ports per U
- Up to 96 fiber ports per U
- Cable management on the front can be installed and removed without any tools
- Accessories for individual comfort and handling
- Customer specific modules on request

Multipurpose rail
for easy cable routing, strain relief and installation of mounting brackets

Conductive surface
for improved bonding and pre-assembled connections for blade receptacles

Fiber optic adaptors with integrated, automatic shutters
for improved laser-safety and dust protection

Wide range of fiber- and RJ45 modules.
- Patch, splice and FanOut modules in all common fiber categories and polishing grades
- Patching on the front, connecting preterminated links on the rear
- Easy assembling of Telegärtner Cat.6_A and Cat.8.1 RJ45 modules

Huge data traffic and high port densities in confined rack space require **reliable**, **scalable** and **flexible** IT infrastructure solutions.

The Telegärtner fiber patch, splice and FanOut modules spare your link budgets, the RJ45 modules of series STX, AMJ-S, -SL and Cat.8.1 provide high performance and the headroom needed in real-life installations. All components are relentlessly **reliable**, so you can entrust them your critical business applications with confidence.

The distribution panel system HD³-ES by Telegärtner grows with your demands on your data network. Thanks to its modular and **scalable** design, you just buy what you need, when you need it. True pay as you grow. Module by module.

Continuously increasing data rates due to new applications necessarily lead to changes in data transmission technology and requires **flexible** IT infrastructures that can easily and economically be adapted to the changing demands. With the extensive portfolio of various copper and fiber modules you can adjust your HD³-ES exactly to your changing needs.

Operators of small and medium-sized data centers benefit from the maximum usefulness of the HD³-ES by Telegärtner. Short installation time, individual configuration, extensions exactly as needed and easy changes of the tool-free mountable modules offer the user a practical solution at a very attractive price.

This is the new all-rounder HD³-ES.

HD³-ES Modules

HD³-ES Modular Patch Panels
Accept modules of half and full height. The modules can be inserted from the front and fixed without tools. Different kinds of modules can be mixed in the same sample. Any combination of modules with 0.5 U and 1 U can be installed in the 1- and 3 U panel.

Order No.	Description	Remarks
H02030A4052	HD³-ES panel 0.5 U	With 4 slots of 0.5 U for mounting of up to 4 half height modules
H02030A4051	HD³-ES panel 1 U	With 4 slots of 1 U for mounting of up to 4 modules of full height, 8 modules of half height or a combination thereof
H02032A4028	HD³-ES panel 3 U	With 12 slots of 1 U for mounting of up to 12 modules of full height, 24 modules of half height or a combination thereof

HD³-ES FO Patch Modules
For breakout and mini-breakout cables as well as for pre-terminated cables (TICNET). Modules with 0.5 U and 1 U can be mixed in 1- and 3 U panels.

Order No.	Description	Remarks
H02050A4070	HD³-ES module patch, 0.5 U 6x LC-D/PC OS2	Module with 6 LC Duplex/PC OS2 adaptors blue, integrated laser protection
H02050A4071	HD³-ES module patch, 0.5 U 6x LC-D/APC OS2	Module with 6 LC Duplex/APC OS2 adaptors green, integrated laser protection
H02050A4072	HD³-ES module patch, 0.5 U 6x LC-D OM3	Module with 6 LC Duplex OM3 adaptors aqua, integrated laser protection
H02050A4073	HD³-ES-Modul Patch, 0,5 U 6x LC-D OM4	Module with 6 LC Duplex OM4 adaptors violet, integrated laser protection
H02050A4074	HD³-ES module patch, 0.5 U 6x LC-D OM5	Module with 6 LC Duplex OM5 adaptors limegreen, integrated laser protection
H02050A4080	HD³-ES module patch, 0.5 U 6x MPO	Module with 6 MPO adaptors black
H02050A4075	HD³-ES module patch, 1 U 12x LC-D/PC OS2	Module with 12 LC Duplex/PC OS2 adaptors blue, integrated laser protection
H02050A4076	HD³-ES module patch, 1 U 2x LC-D/APC OS2	Module with 12 LC Duplex/APC OS2 adaptors green, integrated laser protection
H02050A4077	HD³-ES module patch, 1 U 12x LC-D OM3	Module with 12 LC Duplex OM3 adaptors aqua, integrated laser protection
H02050A4078	HD³-ES module patch, 1 U 12x LC-D OM4	Module with 12 LC Duplex OM4 adaptors violet, integrated laser protection
H02050A4079	HD³-ES module patch, 1 U 12x LC-D OM5	Module with 12 LC Duplex OM5 adaptors limegreen, integrated laser protection

HD³-ES Modules

HD³-ES FO Splice Modules

For loose tube cables. Integrated splice cassette with splice holder for crimp and micro heat shrink splice protectors. Modules come pre-loaded with pigtails. Please order splice protectors separately. Any combination of modules with 0.5 U and 1 U can be installed in the 1- and 3 U panel.

	Order No.	Description	Remarks
	H02050A4081	HD³-ES module splice, 0.5 U 6x LC-D/PC OS2	Module with 6 LC Duplex/PC OS2 adaptors blue, integrated laser protection
	H02050A4082	HD³-ES module splice, 0.5 U 6x LC-D/APC OS2	Module with 6 LC Duplex/APC OS2 adaptors green, integrated laser protection
	H02050A4083	HD³-ES module splice, 0.5 U 6x LC-D OM3	Module with 6 LC Duplex OM3 adaptors aqua, integrated laser protection
	H02050A4084	HD³-ES module splice, 0.5 U 6x LC-D OM4	Module with 6 LC Duplex OM4 adaptors violet, integrated laser protection
	H02050A4085	HD³-ES module splice, 0.5 U 6x LC-D OM5	Module with 6 LC Duplex OM5 adaptors limegreen, integrated laser protection

HD³-ES FO FanOut Modules

With MPO/MTP® adaptors at the back.
Modules come with installed FanOut Kit MPO/MTP®-LC. Any combination of modules with 0.5 U and 1 U can be installed in the 1- and 3 U panel.

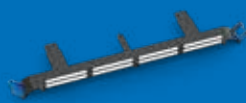|	Order No.	Description	Remarks
	H02050A4086	HD³-ES module FanOut 0.5 U 6x LC-D/PC OS2	Module with 6 LC Duplex/PC OS2 adaptors blue, with installed FanOut kit, integrated laser protection
	H02050A4087	HD³-ES module FanOut 0.5 U 6x LC-D/APC OS2	Module with 6 LC Duplex/APC OS2 adaptors green, with installed FanOut kit, integrated laser protection
	H02050A4088	HD³-ES module FanOut 0.5 U 6x LC-D OM3	Module with 6 LC Duplex OM3 adaptors aqua, with installed FanOut kit, integrated laser protection
	H02050A4089	HD³-ES module FanOut 0.5 U 6x LC-D OM4	Module with 6 LC Duplex OM4 adaptors violet, with installed FanOut kit, integrated laser protection
	H02050A4090	HD³-ES module FanOut 0.5 U 6x LC-D OM5	Module with 6 LC Duplex OM5 adaptors limegreen, with installed FanOut kit, integrated laser protection
	H02050A4091	HD³-ES module FanOut 1 U 12x LC-D/PC OS2	Module with 12 LC Duplex/PC OS2 adaptors blue, with installed FanOut kit, integrated laser protection
	H02050A4092	HD³-ES module FanOut 1 U 12x LC-D/APC OS2	Module with 12 LC Duplex/APC OS2 adaptors green, with installed FanOut kit, integrated laser protection
	H02050A4093	HD³-ES module FanOut 1 U 12x LC-D OM3	Module with 12 LC Duplex OM3 adaptors aqua, with installed FanOut kit, integrated laser protection
	H02050A4094	HD³-ES module FanOut 1 U 12x LC-D OM4	Module with 12 LC Duplex OM4 adaptors violet, with installed FanOut kit, integrated laser protection
	H02050A4095	HD³-ES module FanOut 1 U 12x LC-D OM5	Module with 12 LC Duplex OM5 adaptors limegreen, with installed FanOut kit, integrated laser protection

HD³-ES Modules for RJ45 Jacks and Coupler

Accept STX or AMJ-S / AMJ Cat.8.1 / AMJ-SL RJ45 jacks for twisted pair cables. AMJ-S, AMJ-SL and AMJ Cat.8.1 jacks can be mixed in the same HD3-ES module in 1 U. Modules with 0.5 U and 1 U can be mixed in 1- and 3 U panels. Please order RJ45 jacks separately.

	Order No.	Description	Remarks
	H02025A4017	HD³-ES module 0.5 U for 6x RJ45 STX	Module accepts up to 6 RJ45 jacks type STX
	H02025A4018	HD³-ES module 1 U for 6x RJ45 AMJ	Module accepts up to 6 RJ45 jacks type AMJ-S/-S 2G/-SL/-Cat.8.1
	H02025A4019	HD³-ES module 1 U for 8x RJ45 AMJ	Module accepts up to 8 RJ45 jacks type AMJ-S/-S 2G/-SL/-Cat.8.1

Accessories

To customize the patch panels and for even more convenient installation and patching.

	Order No.	Description
	H02025A4001	HD³-ES cable management and front label holder, 0.5 U
	H02025A4002	HD³-ES cable management and front label holder, 1 U
	H02025A4003	HD³-ES cable management and front label holder, 2x1 U
	H02025A4004	HD³-ES cable management and front label holder, 3 U
	H06000A0086	Rear side mounting bracket M20
	H06000A0087	Rear side mounting bracket M25
	H02030A4053	top-side cover for HD³-ES panel 1 U
	H02025A4020	HD³-ES panel 0.5 U - blank
	H02025A4021	HD³-ES panel 1 U - blank
	L00040A0127	HD³-ES bonding set

ALLOWS EASY PATCHING.

Uniboot patch cords

The built-in pull / pull flap allows comfortable and easy patching of the LC duplex cords even at high port densites. Up to 96 LC fiber ports per U can be patched quickly and reliably.

Also the change of fiber polarity does not require any special knowledge or tooling. Available in all common fiber and polishing classes, as well as in lengths from 0.5 m to 10 m. The perfect combination with HD³-ES.

Order No.	Description	Colour	Length
L00870U0004	Patch cord 2xG50/125, OM3	aqua	0.5 m
L00870U0005	Patch cord 2xG50/125, OM3	aqua	1.0 m
L00871U0004	Patch cord 2xG50/125, OM3	aqua	1.5 m
L00871U0005	Patch cord 2xG50/125, OM3	aqua	2.0 m
L00872U0004	Patch cord 2xG50/125, OM3	aqua	2.5 m
L00872U0005	Patch cord 2xG50/125, OM3	aqua	3.0 m
L00873U0002	Patch cord 2xG50/125, OM3	aqua	5.0 m
L00875U0002	Patch cord 2xG50/125, OM3	aqua	10.0 m
L00870U0006	Patch cord 2xG50/125, OM4	violet	0.5 m
L00870U0007	Patch cord 2xG50/125, OM4	violet	1.0 m
L00871U0006	Patch cord 2xG50/125, OM4	violet	1.5 m
L00871U0007	Patch cord 2xG50/125, OM4	violet	2.0 m
L00872U0006	Patch cord 2xG50/125, OM4	violet	2.5 m
L00872U0007	Patch cord 2xG50/125, OM4	violet	3.0 m
L00873U0003	Patch cord 2xG50/125, OM4	violet	5.0 m
L00875U0003	Patch cord 2xG50/125, OM4	violet	10.0 m
L00870U0008	Patch cord 2xG50/125, OM5	limegreen	0.5 m
L00870U0009	Patch cord 2xG50/125, OM5	limegreen	1.0 m
L00871U0008	Patch cord 2xG50/125, OM5	limegreen	1.5 m
L00871U0009	Patch cord 2xG50/125, OM5	limegreen	2.0 m
L00872U0008	Patch cord 2xG50/125, OM5	limegreen	2.5 m
L00872U0009	Patch cord 2xG50/125, OM5	limegreen	3.0 m
L00873U0004	Patch cord 2xG50/125, OM5	limegreen	5.0 m
L00875U0004	Patch cord 2xG50/125, OM5	limegreen	10.0 m

Order No.	Description	Colour	Length
L00870U0000	Patch cord 2xE9/125, OS2/PC	blue	0.5 m
L00870U0001	Patch cord 2xE9/125, OS2/PC	blue	1.0 m
L00871U0000	Patch cord 2xE9/125, OS2/PC	blue	1.5 m
L00871U0001	Patch cord 2xE9/125, OS2/PC	blue	2.0 m
L00872U0000	Patch cord 2xE9/125, OS2/PC	blue	2.5 m
L00872U0001	Patch cord 2xE9/125, OS2/PC	blue	3.0 m
L00873U0000	Patch cord 2xE9/125, OS2/PC	blue	5.0 m
L00875U0000	Patch cord 2xE9/125, OS2/PC	blue	10.0 m
L00870U0002	Patch cord 2xE9/125, OS2/APC	green	0.5 m
L00870U0003	Patch cord 2xE9/125, OS2/APC	green	1.0 m
L00871U0002	Patch cord 2xE9/125, OS2/APC	green	1.5 m
L00871U0003	Patch cord 2xE9/125, OS2/APC	green	2.0 m
L00872U0002	Patch cord 2xE9/125, OS2/APC	green	2.5 m
L00872U0003	Patch cord 2xE9/125, OS2/APC	green	3.0 m
L00873U0001	Patch cord 2xE9/125, OS2/APC	green	5.0 m
L00875U0001	Patch cord 2xE9/125, OS2/APC	green	10.0 m

EASY, QUICK, RELIABLE: THE TICNET CONFIGURATOR.

www.telegaertner.com/go/ticnet

The TICNET configurator is a convenient and quick way of ordering preassembled cabling components from the factory. Just follow six simple steps to order the product you need:

1	Select type of product
2	Define product
3	Check final product
4	Add product to shopping basket
5	Enter address details
6	Send inquiry

Whether you need copper or optical fiber products, cables or patch panels, solutions for office buildings, data centers, industrial facilities or home networks: the TICNET configurator service is available around the clock to inquire customised products. Naturally it is also possible to save your configurations.

Telegärtner

Your distributor:

T00013A0383