

## RapidNet Keyed LC

Secured Identification

**HellermannTyton**

The use of colour coded and differently keyed connectors and adapters in an optical network can aid the segregation or identification of parts, or paths, within a network infrastructure.

In addition, the use of keyed connectors can help to reduce the risk of accidental or malicious network access, particularly in shared access areas or in secure hierarchical environments such as government, military or research facilities.

### Segregate Shared Access Networks

Within co-location and multi-client sites, keyed connectivity can be used to dedicate circuits to specific clients or services.

Alternatively, the use of the colour coding can be used to identify and segregate locations such as zones, halls, PODs and cages.

Diverse routing paths can also be identified and managed with the use of colour coded keyed connectivity.

### Manage Secure Hierarchical Environments

It is common for government, security, defence or financial organisations to maintain networks with varying levels of security classification within shared facilities.

The use of keyed LC connectors and adapters within the network infrastructure can help to maintain security and prevent unauthorised or accidental network access.

### Maintain Network Security

Many networks contain highly sensitive or classified information including financial, personal and product development data while others contain details from applications such as Digital Video Recording, security tags and biometrics.

For these networks, maintaining the network integrity and security is of the highest importance.

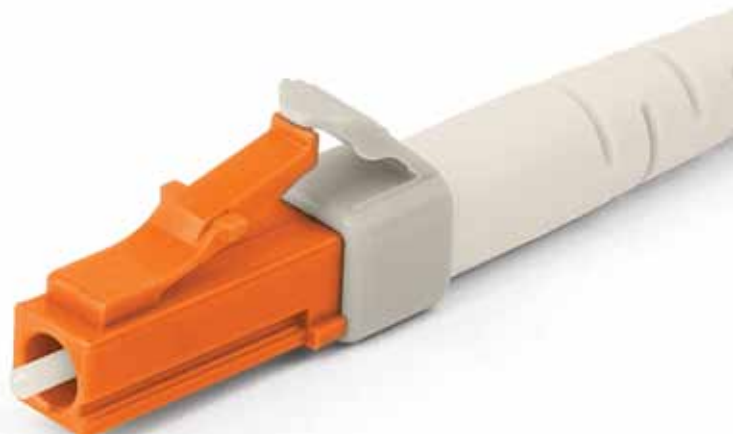
Use of differently keyed connectors and matching adapters helps prevent access to a channel and ensures the security of the application and information.



RapidNet Cassette with Keyed LC Adapters

### Features and Benefits

- Mechanical segregation and identification of network paths or security hierarchies
- Reduce the risk of accidental or malicious network access
- Available in RapidNet and RapidNet MTP, fan out cables and patch leads
- 12 different mechanical and colour options
- Keyed LC connectors will only mate with the corresponding adapter
- Standard LC connectors will not mate with keyed adapters
- High quality low loss LC ferrule



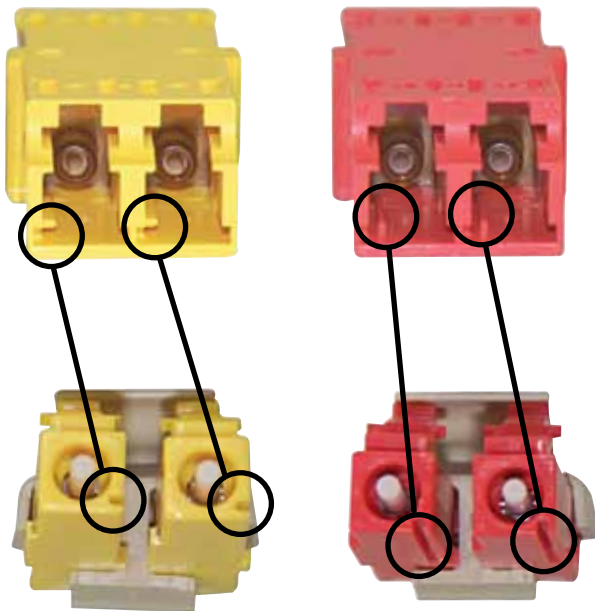
**Product Features**

- The connectors and adapters are manufactured to high quality single mode tolerances ensuring good alignment characteristics and low losses.
- Typical losses are 0.15dB for multimode and 0.08dB for single mode.
- The performance of the mated pair meets or exceeds the performance requirements of TIA568-C.3 and IEC 874-14 inter-operability.
- The adapters are manufactured as a single piece moulding, making them stronger and helping to ensure good mechanical alignment. A ceramic sleeve ensures precise optical alignment of the ferrules and low optical losses.
- The connectors and adapters have to colour match in order to produce a network connection; differing colours cannot be mated thereby preventing the connection of the fibre channel.
- The keying of the 12 colour options is created through a series of slots and protrusions ensuring no mixed colours can be installed, even when forced.

The Keyed LC connectors and adapters come in 8 standard colours



4 additional colours are available by special order



The keys are created using combinations of unique protrusions and slots on both the adaptor and connector.

Connection Colour Coding Table				
Colour	RapidNet & Patch Leads		Fan Out	
Cobalt (Blue)	L	H	F	H
Pink	L	2	F	2
Yellow	L	3	F	3
Red	L	4	F	4
Orange	L	5	F	5
Grey	L	6	F	6
Turquoise	L	7	F	7
Olive (Green)	L	8	F	8
White*	L	W	F	W
Violet*	L	V	F	V
Brown*	L	B	F	B
Magenta*	L	M	F	M

\* Available by special order only

RapidNet, HellermannTyton's industry leading pre-terminated structured cabling system, is available pre-assembled with keyed LC adapters.

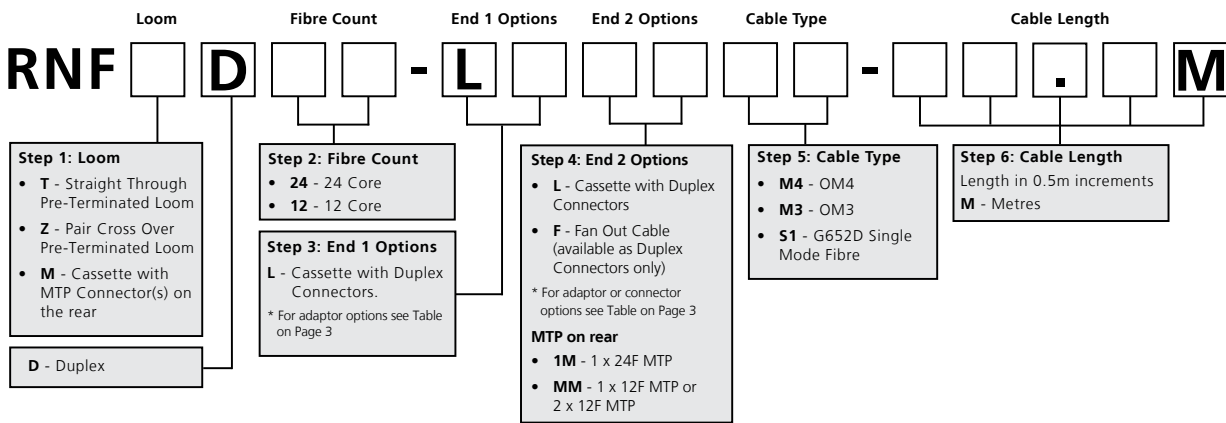
RapidNet cassettes at both ends of a link may be specified with keyed LC adapters, alternatively a single end may be keyed with the second end using standard adapters. This may be of use where one end is in a restricted access area, such as the core infrastructure, and the other is in an open access area, such as the user patching interface.

RapidNet MTP cassettes are also available with keyed LC connectors. The RapidNet MTP cassettes are then combined with a standard MTP cable assembly to give a full link.



Keyed RapidNet MTP Cassette

**RapidNet Part Number:**



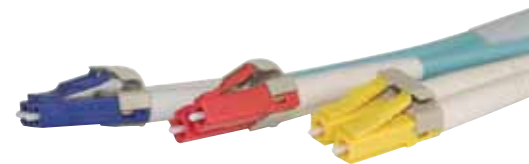
Example: **RNFTD24-L2F3M4-10.5M** = Straight Through Pre-Terminated Loom, 24 Core, End 1: Cassette with Duplex, Pink Adapters, End 2: Fan Out, Yellow Connectors, OM4, 10.5m.

**Keyed Patch Leads**

HellermannTyton's range of patch leads to support the keyed RapidNet looms can be configured with either both ends keyed or one end keyed, the other standard.

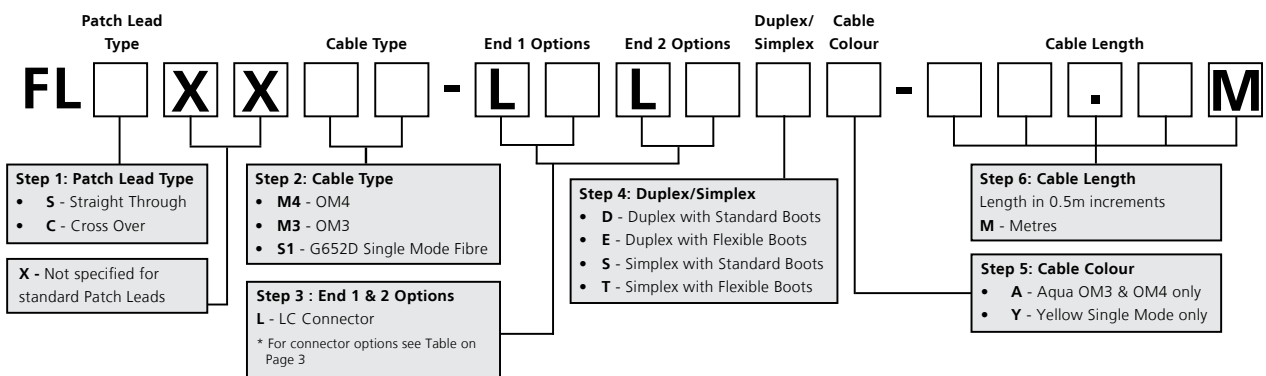
Keyed connectors at both ends of the patch lead may be used in a cross connect patching situation whilst single end keyed patch lead enable connections into active equipment with standard LC adapter interfaces.

Patch leads are available in standard lengths of 1, 2, 3, 5, & 10m. Other lengths are available to order.



Coloured Keyed Patch Leads

**Patch Lead Part Number:**



Example: **FLSXXM4L2-L3DA-10.5M** = Straight Through, OM4, End 1: Pink LC Connector, End 2: Yellow LC Connector, Duplex with standard boots, Aqua Cable, 10.5m



## Keyed Fan Out to Fan Out Cables

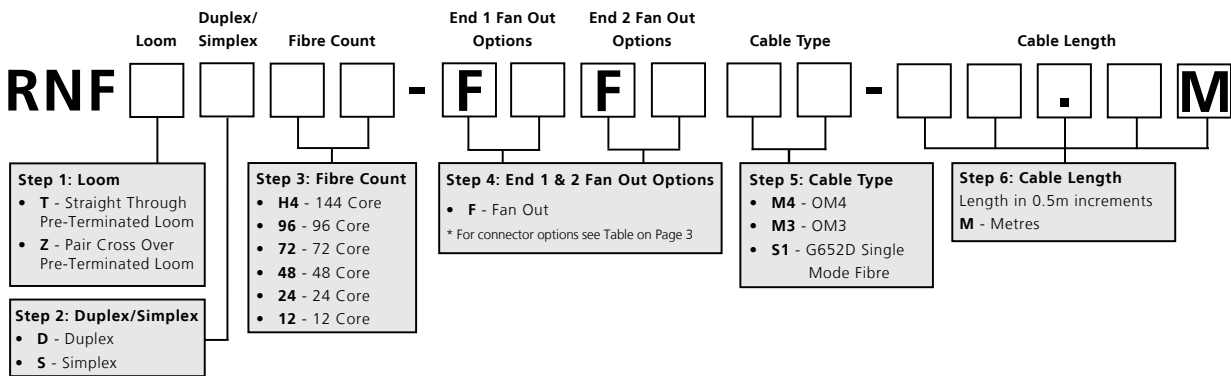
HellermannTyton's fan out to fan out cables enable direct patching between equipment or racks without the need to use valuable U space within the cabinet, or to reduce the space requirements within cable routes and pathways; e.g. the 144 core version uses an 8mm diameter cable, a significant space saving compared to 72 standard patch cords.

The fan out unit is metal and includes internal strain relief. The protective tubing ensures the elements are as robust as standard patch leads.



Multimode 24 Core Keyed LC Fan Out to LC Fan Out

### Fan Out to Fan Out Part Number:



Example: **RNFTSH4-F7F5M3-25.5M** = Straight Through Pre-Terminated Loom, Simplex, 144 Core, End 1: Turquoise Fan Out, End 2: Orange Fan Out, OM3, 25.5m.

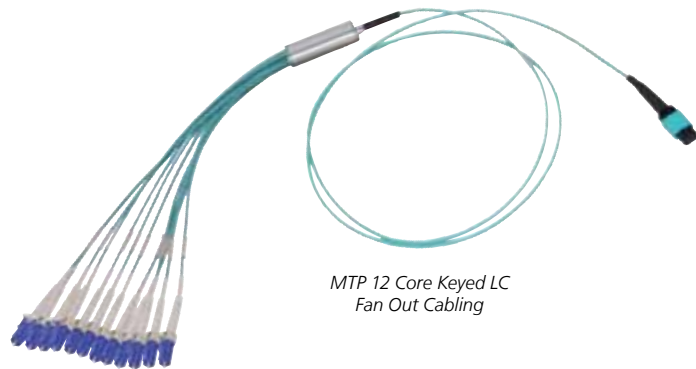
## MTP to Keyed Fan Out

HellermannTyton's MTP to fan out cables are used in conjunction with either RapidNet MTP VHD or RapidNet MTP.

RapidNet MTP VHD saves valuable rack space by enabling high density patching upto 288 10GbE ports (576 fibres) in 1U of rack space, the equivalent of 6U of standard LC patching.

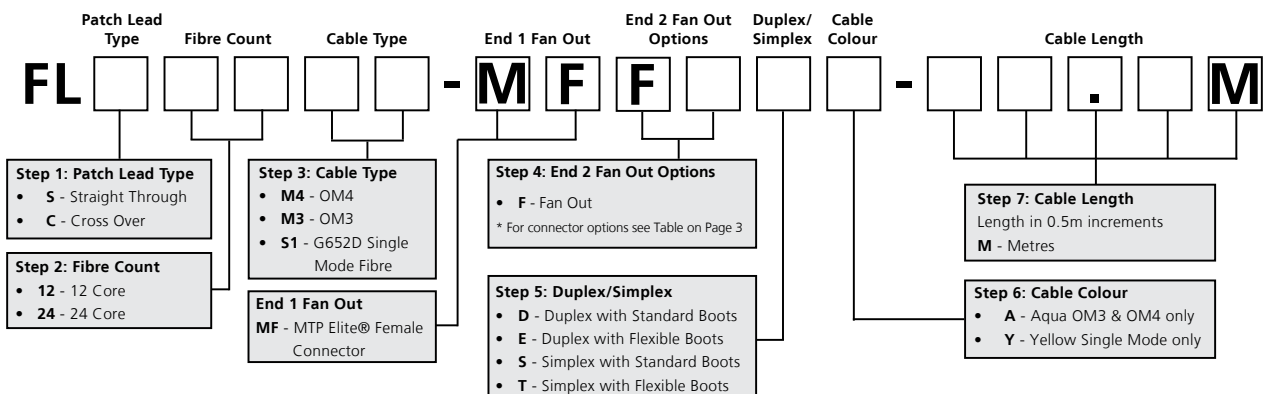
RapidNet MTP enables simplified cross patching with direct connection into active equipment.

The cables are available as 12 or 24 cores with Elite® low loss MTP as standard.



MTP 12 Core Keyed LC Fan Out Cabling

### MTP to Fan Out Part Number:



Example: **FLC12M4-MFL85A-10.5M** = Cross Over, 12 Core, OM4, Olive (Green) Fan Out, Simplex with standard boots, Aqua Cable, 10.5m

Europe

 **HellermannTyton GmbH - Austria**  
Rennbahnweg 65  
1220 Vienna  
Tel: +43 12 59 99 55-0  
Fax: +43 12 59 99 11  
E-Mail: office@HellermannTyton.at  
www.HellermannTyton.at

 **HellermannTyton – Czech Republic**  
E-Mail: officeCZ@HellermannTyton.at  
www.HellermannTyton.cz

 **HellermannTyton – Denmark**  
Baldersbuen 15D 1. TV  
2640 Hedehusene  
Tel: +45 702 371 20  
Fax: +45 702 371 21  
E-Mail: htdk@HellermannTyton.dk  
www.HellermannTyton.dk

 **HellermannTyton – Finland**  
Sähkötie 8  
01510 Vantaa  
Tel: +358 9 8700 450  
Fax: +358 9 8700 4520  
E-Mail: myynti@HellermannTyton.fi  
www.HellermannTyton.fi

 **HellermannTyton S.A.S. – France**  
2 rue des Hêtres, B.P. 130  
78196 Trappes Cedex  
Tel: +33 1 30 13 80 00  
Fax: +33 1 30 13 80 60  
E-Mail: info@HellermannTyton.fr  
www.HellermannTyton.fr

 **HellermannTyton GmbH – Germany**  
Großer Moorweg 45  
25436 Tornesch  
Tel: +49 4122 701-0  
Fax: +49 4122 701-400  
E-Mail: info@HellermannTyton.de  
www.HellermannTyton.de

 **HellermannTyton KFT – Hungary**  
Kisfaludy u. 13  
1044 Budapest  
Tel: +36 1 369 4151  
Fax: +36 1 369 4151  
E-Mail: officeHU@HellermannTyton.at  
www.HellermannTyton.hu

 **HellermannTyton S.r.l. – Italy**  
Via Praimbole 9 Bis  
35010 Limena (PD)  
Tel: +39 049 767 870  
Fax: +39 049 767 985  
E-Mail: info@HellermannTyton.it  
www.HellermannTyton.it

 **HellermannTyton Ltd – Ireland**  
Unit 77 Cherry Orchard  
Industrial Estate  
Ballyfermot, Dublin 10  
Tel: +353 1 626 8267  
Fax: +353 1 626 8022  
E-Mail: sales@HellermannTyton.ie  
www.HellermannTyton.co.uk

 **HellermannTyton B.V. – Belgium/Netherlands**  
Vanadiumweg 11-C  
3812 PX Amersfoort  
Tel: +31 (0) 33 460 06 90  
Fax: +31 (0) 33 460 06 99  
E-Mail (NL): info@HellermannTyton.nl  
E-Mail (BE): info@HellermannTyton.be  
www.HellermannTyton.nl  
www.HellermannTyton.be

 **HellermannTyton AS – Norway**  
PO Box 240 Alnabru  
0614 Oslo  
Tel: +47 23 17 47 00  
Fax: +47 22 97 09 70  
E-Mail: firmapost@HellermannTyton.no  
www.HellermannTyton.no

 **HellermannTyton – Poland**  
E-Mail: info@HellermannTyton.pl  
www.HellermannTyton.pl

 **HellermannTyton – Romania**  
E-Mail: officeRO@HellermannTyton.at  
www.HellermannTyton.at

 **OOO HellermannTyton – Russia**  
40/4, Pulkovskoe road,  
BC Technopolis Pulkovo, office A 8081  
196158, St. Petersburg  
Tel: +7 812 386 00 09  
Fax: +7 812 386 00 08  
E-Mail: info@HellermannTyton.ru  
www.HellermannTyton.ru

 **HellermannTyton – Slovenia**  
Branch Office Ljubljana  
Podružnica Ljubljana, Leskoškova 6  
1000 Ljubljana  
Tel: +386 1 433 70 56  
Fax: +386 1 433 63 21  
E-Mail: officeSI@HellermannTyton.at  
www.HellermannTyton.si

 **HellermannTyton España S.L. – Spain/Portugal**  
Avda. de la Industria nº 37, 2º 2º  
28.108 Alcobendas, Madrid  
Tel: +34 91 661 2835  
Fax: +34 91 661 2368  
E-Mail:  
HellermannTyton@HellermannTyton.es  
www.HellermannTyton.es

 **HellermannTyton AB – Sweden**  
Datavägen 5, PO Box 569  
17526 Järfälla  
Tel: +46 8 580 890 00  
Fax: +46 8 580 890 01  
E-Mail: support@HellermannTyton.se  
www.HellermannTyton.se

 **HellermannTyton Ltd – UK**  
William Prance Road  
Plymouth International Medical  
and Technology Park  
Plymouth  
Devon  
PL6 5WR  
Tel: +44 (0) 1752 701 261  
Fax: +44 (0) 1752 790 058  
E-Mail: info@HellermannTyton.co.uk  
www.HellermannTyton.co.uk

 **HellermannTyton Ltd – UK**  
Sharston Green Business Park  
1 Robeson Way  
Altrincham Road, Wythenshawe  
Manchester M22 4TY  
Tel: +44 161 947 2200  
Fax: +44 161 947 2220  
E-Mail: sales@HellermannTyton.co.uk  
www.HellermannTyton.co.uk


 **HellermannTyton Ltd – UK**  
Main Contact for Customer Service  
Wharf Approach  
Aldridge, Walsall, West Midlands  
WS9 8BX  
Tel: +44 1922 458 151  
Fax: +44 1922 743 237  
E-Mail: info@HellermannTyton.co.uk  
www.HellermannTyton.co.uk

 **HellermannTyton Data Ltd – UK**  
Cornwell Business Park  
43 - 45 Salthouse Road, Brackmills  
Northampton NN4 7EX  
Tel: +44 1604 707 420  
Fax: +44 1604 705 454  
E-Mail: sales@htdata.co.uk  
www.htdata.co.uk

 **HellermannTyton – Canada**  
Tel: +1 905 726 1221  
Fax: +1 905 726 8538  
E-Mail: sales@HellermannTyton.ca  
www.HellermannTyton.ca

 **HellermannTyton – Mexico**  
Tel: +52 333 133 9880  
Fax: +52 333 133 9861  
E-Mail: info@HellermannTyton.com.mx  
www.HellermannTyton.com

 **HellermannTyton – USA**  
Tel: +1 414 355 1130  
Fax: +1 414 355 7341  
E-Mail: corp@htamericas.com  
www.HellermannTyton.com

 **HellermannTyton – Argentina**  
Tel: +54 11 4754 5400  
Fax: +54 11 4752 0374  
E-Mail: ventas@HellermannTyton.com.ar  
www.HellermannTyton.com.ar

 **HellermannTyton – Brazil**  
Tel: +55 11 4815 9000  
Fax: +55 11 4815 9030  
E-Mail: vendas@HellermannTyton.com.br  
www.HellermannTyton.com.br

Asia-Pacific

 **HellermannTyton – Australia**  
Tel: +612 9525 2133  
Fax: +612 9526 2495  
E-Mail:  
cservice@HellermannTyton.com.au  
www.HellermannTyton.com.au

 **HellermannTyton – China**  
Tel: +86 510 8528 2536  
Fax: +86 510 8528 2731  
E-Mail:  
cservice@HellermannTyton.com.cn  
www.HellermannTyton.com.cn


 **HellermannTyton – Hong Kong**  
Tel: +852 2831 9090  
Fax: +852 2832 9381  
E-Mail:  
cservice@HellermannTyton.com.hk  
www.HellermannTyton.com.sg

 **HellermannTyton – India**  
Agra: +91 120 413 3384  
Bangalore: +91 776 001 0104  
Chennai: +91 996 264 3939  
Faridabad: +91 971 851 7797  
Ghaziabad: +91 93 1354-1671  
Pune: +91 727 601 2200  
E-Mail: cservice@HellermannTyton.co.in  
www.HellermannTyton.co.in

 **HellermannTyton – Japan**  
Tel: +81 3 5790 3111  
Fax: +81 3 5790 3112  
E-Mail: cservice@HellermannTyton.co.jp  
www.HellermannTyton.co.jp

 **HellermannTyton – Korea**  
Tel: +82 31 388 8012  
Fax: +82 31 388 8013  
E-Mail: cservice@hellermannnyton.co.kr  
www.hellermannnyton.co.kr

 **HellermannTyton – Philippines**  
Tel: +632 752 6551  
Fax: +632 752 6553  
E-Mail: cservice@HellermannTyton.com.ph  
www.HellermannTyton.com.ph

 **HellermannTyton – Singapore**  
Tel: +65 6852 8585  
Fax: +65 6756 6798  
E-Mail: cservice@HellermannTyton.sg  
www.HellermannTyton.com.sg

 **HellermannTyton – Thailand**  
Tel: +662 237 6702 / 266 0624  
Fax: +662 266 8664  
E-Mail: cservice@HellermannTyton.co.th  
www.HellermannTyton.com.sg

Africa

 **HellermannTyton – South Africa**  
Tel: +27 11 879 6680  
Fax: +27 11 879 6601  
E-Mail: sales.jhb@Hellermann.co.za  
www.HellermannTyton.co.za

HellermannTyton

HellermannTyton Data Ltd, Cornwell Business Park, Salthouse Road, Brackmills, Northampton, NN4 7EX, United Kingdom  
Tel: +44 (0) 1604 707420 Fax: +44 (0) 1604 705454 www.htdata.co.uk