

Excel System Warranty - Terms & Conditions

Excel is a world-class premium performing end-to-end infrastructure solution - designed, manufactured, supported and delivered - without compromise.

www.excel-networking.com




excel
without compromise.

Revised: July 2021



Excel System Warranty - Terms & Conditions

This document covers:

- Excel Category 8 
- Excel Category 6_A 
- Excel Category 6 
- Excel Category 5e 
- Excel Fibre Optic 
- Excel Voice Cabling 

The purpose of this document is to outline the terms and conditions of the Excel Structured Cabling System Warranty.

Excel – An Introduction

Excel is a world-class premium performing end-to-end infrastructure solution – designed, manufactured, supported and delivered – without compromise.

Excel is driven by a team of industry experts, ensuring the latest innovation and manufacturing capabilities are implemented to surpass quality and performance standards, technical compliance and excellence.

Excel Partner Programme

The Excel partner programme offers installers two levels of accreditation, Excel Cabling Partner (ECP) and an Excel Solutions Partner (ESP).

Acceptance to either programme follows an application process based around technical and commercial capability, and commitment to undergo extensive training and sit an exam to demonstrate a full understanding of the Excel Structured Cabling System and how to design, install and test systems in accordance with the Excel guidelines, best practice and above all standards compliance.



Excel System Warranty

The Excel System Warranty provides a 25-year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed. The Excel System Warranty is only available when the said system is designed, supplied and installed by an accredited Excel Partner.

If the accredited Excel Partner does not pay in full for the goods supplied under the warranty in accordance with terms, the warranty will become null and void. In the event that this occurs the end user will be notified immediately by Excel

It is the accredited Excel Partner's responsibility to ensure that the end user is fully aware of the terms and conditions on which the warranty is supplied.



How does it work?

Once site testing has been completed, the Excel Partner visits the Excel Partner Area at www.excel-networking.com to apply for a warranty via the online system within 60 days of the final test result date. When this information has been evaluated and accepted by our Excel Warranty team, certification will be issued. Until the certificate is issued the installation is not covered by the warranty.

Upon receipt of the application, and the required information in the correct format, the Excel Warranty team will complete the above process within a maximum 48 hours. Once a warranty has been approved a notification will be sent to you by email to advise you that the warranty has been issued and you will be able to visit the warranty area to download your certificate or to send a link directly to your end user client.



To qualify for the warranty the installation **must** be made up entirely of Excel or approved strategic partner products, which must be new at the time of installation.

What is covered by the warranty?

The Excel system warranty provides assurance of fibre and/or copper link performance, covering patch panel to outlet and/or patch panel to patch panel links. The warranty covers components and applications. This means that if a component in any link fails, or the structured cabling fails to support an application that it has been tested to carry, then a claim can be made on the warranty.

All links must be installed and tested to Excel and industry guidelines to qualify for the warranty. (refer to 'Warranty procedure' and Installation Guidelines section detailed on the Excel website).

The following, if tested and included in the warranty registration form are covered:

Copper and Fibre versions of

- Horizontal links (Patch Panel to Outlet)
- Cabinet links (Patch Panel to Patch Panel)
- Backbone links (Patch Panel to Patch Panel between communications room or area)
- MPO/MTP Optical Fibre installations (Test in accordance with the details of the Fibre Optic Links section below)
- Enbeam Blown Fibre
- Copper Harness, Switch links and Modified Permanent Links (comprising of patch panel and solid or stranded patch leads)
- Patch leads (must be Excel and detailed on the application)
- Consolidation Points and Cables when installed and tested in accordance with Installation Guidelines
- Environ Racks
- Intelligent, Modular and Standard PDUs (The warranty is for 3 years on PDUs included in the registration)

NOTE: Excel acknowledges that its cables may be installed into environments which may require paint to be applied to all surfaces. Whilst we are confident that Excel cables can tolerate such conditions we accept no liability for any reduction in electrical performance. It is the responsibility of the paint manufacturer to identify if the paint will alter a cables "reaction to fire" under EU Regulation 305/2011.

What isn't covered by the warranty?

All information supplied to Excel from the Excel Partner pertaining to the warranty must be an accurate and true representation of the installation work undertaken. Should it become known that deliberately falsified information has been tendered to Excel, the warranty shall be rendered null and void.

- The warranty does not cover accidental or malicious damage to the installed links by individuals.
- The warranty does not cover damage caused by external circumstances beyond our control.
- The warranty does not cover links for which compliant test results were not supplied at the time of application. If subsequent work is carried out on the network or surrounding services (electrical, water, etc) that may have an effect on the performance of the cabling, the cabling must be retested. If the cabling is not retested, this may invalidate the warranty. For further detail please refer to our full terms and conditions of sale.

What if there is a problem?

In the event of a problem with the installation, the end user should contact the Excel Partner who installed the system. They will undertake a site survey to establish the extent of the problem and the actual cause. The Excel Partner shall contact the Excel Warranty team to notify them of a potential problem. Excel reserve the right to detail specific testing that shall be carried out by the installer, conduct a site visit, request samples, have suspected faulty product returned to Excel. Failure to comply with these requirements may, at the sole discretion of Excel, invalidate the claim. If any of the reported links have been tested with a 3rd party certified tester, Excel also reserves the right to make comparative tests using our own manufacturer-calibrated equipment. If it is found that installed Excel product covered by a valid warranty is at fault, then the Excel Partner will supply replacement product to resolve the problem at no cost to the customer.

- Excel Cabling Partners are eligible to claim the value of Excel product back from Excel.
- Excel Solutions Partners are eligible to claim the value of the Excel product, and the cost of labour to rectify the problem, back from Excel. Labour costs are covered at the rate agreed in the Excel Partner agreement.

If the Excel Partner is no longer in business, the end user should contact Excel's technical support department, providing full details, in writing, of the installation and problem. Excel or an alternative Excel Partner will provide support, and where necessary replace/repair the products, to ensure the certified levels of performance are achieved.

If an engineer is despatched to the site and it is found that the cabling system or workmanship is not at fault, then the end user will be charged at the standard rate for the engineer's time and travelling expenses.


Warranty Application Process

Applying for an Excel 25 Year Product and Application Warranty couldn't be easier. The whole process is now undertaken via the '**Partner Area**' located on the Excel website www.excel-networking.com

Please follow these simple steps to ensure that your warranty application is processed quickly and efficiently.

Step One

Visit www.excel-networking.com

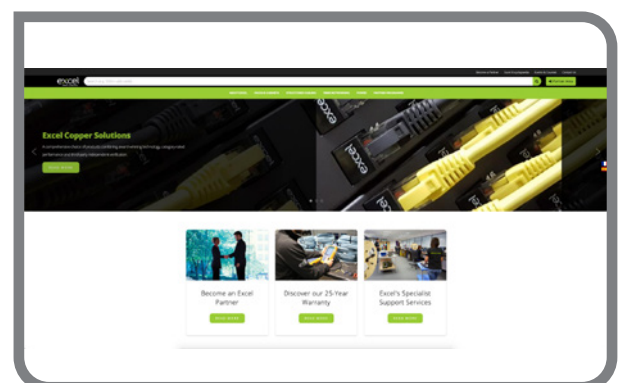
Click on the '**Partner Area**'  you will be required to enter your email and password to enter this area.

The link to the '**Partner Area**' is at the very top of the webpage.

Once logged in click on the dashboard icon 

If you are an accredited Excel Partner and you haven't yet registered for the '**Partner Area**' please email admin@excel-networking.com and a user name and password will be set up and sent to you within 24 working hours.

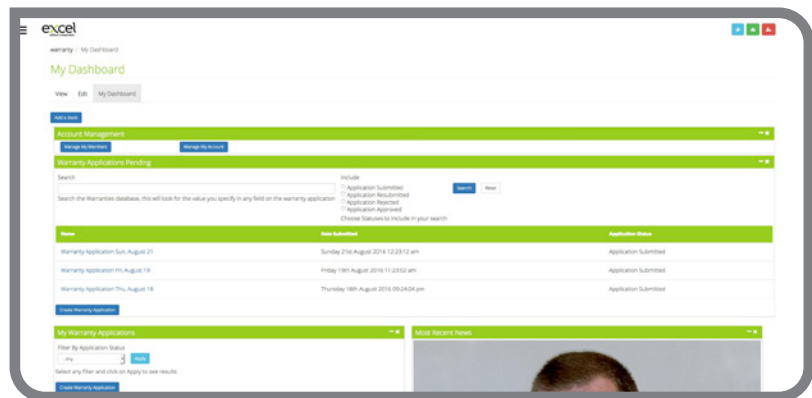
Note: To ensure only the authorised people at your company can view the Excel Partner Area, we will set up the requestor as an '**Administrator**' level so that they are the only ones that can then add and remove users to the site.



Step Two

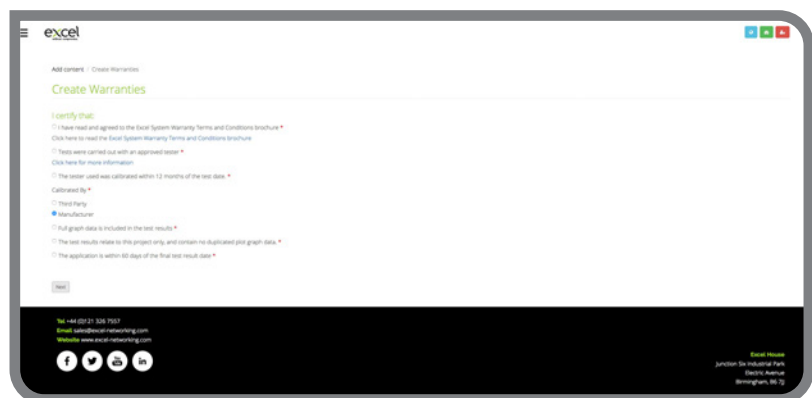
You will be presented with the dashboard that includes 'My Warranty Applications' – click on 'Create Warranty'

Note: You can reorder how the information is shown on the screen by dragging and dropping each block or you can 'Add a Block' or take them away depending on what information you would like to see on the screen.



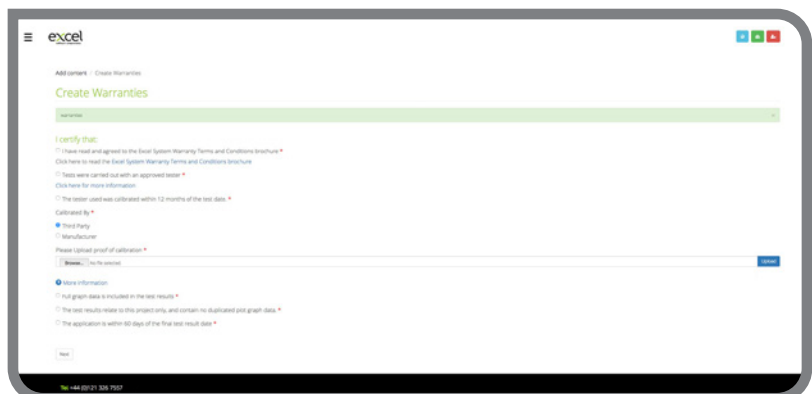
Step Three

To create your warranty you need to certify a number of points to acknowledge the terms and conditions, before you can proceed to the next stage.



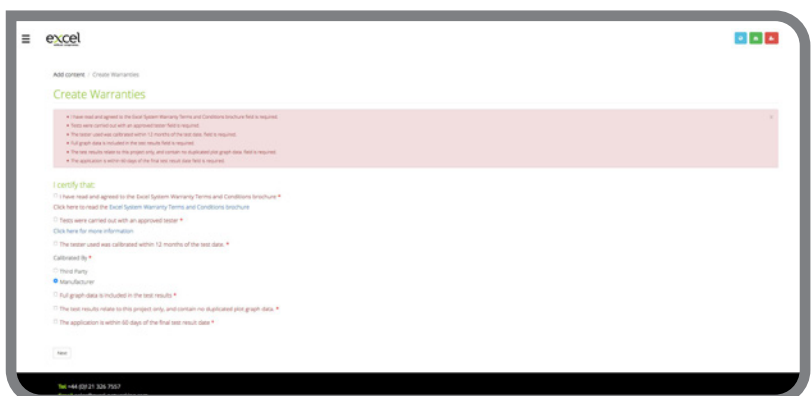
Step Four

The tester used to verify the results must have been calibrated within the last 12 months – you will be asked to provide a copy of the certificate if the tester was calibrated by a third party other than the manufacturer



Step Five

Before you proceed you must have read, understood and met the requirements of the terms and conditions.



Step Six

Account Details

Please check and confirm that your company details are correct.

The screenshot shows the 'Account Details' section of the 'Create Warranties' form. It includes fields for 'Account Company Name', 'Website', 'Integrator ID', 'Account Address 1', 'Account Address 2', 'Account Address 3', 'City', 'Country', 'Postcode', and 'Phone'. There is a checkbox to 'Confirm that these details are correct' and 'Next' and 'Back' buttons at the bottom.

Step Seven

Project Information

Please add the full details of the end user site that is being warranted.

The screenshot shows the 'Project Information' section of the 'Create Warranties' form. It includes fields for 'Project/Phase Name', 'End User Contact Name', 'End User Contact Email', 'Project Address Line 1', 'Project Address Line 2', 'Project City/Town', 'Project County/Region', 'Project Postcode', and 'Project Date'. There are also 'Start Date' and 'End Date' dropdown menus at the bottom.

Step Eight

Enter the exact details of the products that you want to include in the warranty and to what standard class.

The screenshot shows the 'Components' section of the 'Create Warranties' form. It has two main sections: 'Copper' and 'Pipes'. Each section has fields for 'Type', 'Amount', and 'Standard'. There are 'Add' and 'Remove' buttons for each section.

This screenshot shows the details for a 'Copper' component. It includes fields for 'Copper Type', 'Copper Patch Card', 'Copper Amount', and 'Copper Standard'. There is a 'None' option for the standard.

This screenshot shows the details for a 'Pipes' component. It includes fields for 'Pipe Type', 'Pipe Amount', and 'Pipe Standard'. There is a 'None' option for the standard.

This screenshot shows the details for a 'Copper' component with a dropdown menu open for the 'Copper Standard' field. The dropdown menu lists various standards including 'BS 5839-1:2002', 'BS 5839-2:2002', 'BS 5839-3:2002', 'BS 5839-4:2002', 'BS 5839-5:2002', 'BS 5839-6:2002', 'BS 5839-7:2002', 'BS 5839-8:2002', 'BS 5839-9:2002', 'BS 5839-10:2002', 'BS 5839-11:2002', 'BS 5839-12:2002', 'BS 5839-13:2002', 'BS 5839-14:2002', 'BS 5839-15:2002', 'BS 5839-16:2002', 'BS 5839-17:2002', 'BS 5839-18:2002', 'BS 5839-19:2002', 'BS 5839-20:2002', 'BS 5839-21:2002', 'BS 5839-22:2002', 'BS 5839-23:2002', 'BS 5839-24:2002', 'BS 5839-25:2002', 'BS 5839-26:2002', 'BS 5839-27:2002', 'BS 5839-28:2002', 'BS 5839-29:2002', 'BS 5839-30:2002', 'BS 5839-31:2002', 'BS 5839-32:2002', 'BS 5839-33:2002', 'BS 5839-34:2002', 'BS 5839-35:2002', 'BS 5839-36:2002', 'BS 5839-37:2002', 'BS 5839-38:2002', 'BS 5839-39:2002', 'BS 5839-40:2002', 'BS 5839-41:2002', 'BS 5839-42:2002', 'BS 5839-43:2002', 'BS 5839-44:2002', 'BS 5839-45:2002', 'BS 5839-46:2002', 'BS 5839-47:2002', 'BS 5839-48:2002', 'BS 5839-49:2002', 'BS 5839-50:2002', 'BS 5839-51:2002', 'BS 5839-52:2002', 'BS 5839-53:2002', 'BS 5839-54:2002', 'BS 5839-55:2002', 'BS 5839-56:2002', 'BS 5839-57:2002', 'BS 5839-58:2002', 'BS 5839-59:2002', 'BS 5839-60:2002', 'BS 5839-61:2002', 'BS 5839-62:2002', 'BS 5839-63:2002', 'BS 5839-64:2002', 'BS 5839-65:2002', 'BS 5839-66:2002', 'BS 5839-67:2002', 'BS 5839-68:2002', 'BS 5839-69:2002', 'BS 5839-70:2002', 'BS 5839-71:2002', 'BS 5839-72:2002', 'BS 5839-73:2002', 'BS 5839-74:2002', 'BS 5839-75:2002', 'BS 5839-76:2002', 'BS 5839-77:2002', 'BS 5839-78:2002', 'BS 5839-79:2002', 'BS 5839-80:2002', 'BS 5839-81:2002', 'BS 5839-82:2002', 'BS 5839-83:2002', 'BS 5839-84:2002', 'BS 5839-85:2002', 'BS 5839-86:2002', 'BS 5839-87:2002', 'BS 5839-88:2002', 'BS 5839-89:2002', 'BS 5839-90:2002', 'BS 5839-91:2002', 'BS 5839-92:2002', 'BS 5839-93:2002', 'BS 5839-94:2002', 'BS 5839-95:2002', 'BS 5839-96:2002', 'BS 5839-97:2002', 'BS 5839-98:2002', 'BS 5839-99:2002', 'BS 5839-100:2002'.

Step Nine

Other Information

Enter here any other information that we need to know about this warranty application.

Step Ten

This will give you a summary of the warranty and gives you the ability to go back into the warranty application to edit the information if required.

IMPORTANT

Submitting Test Results

- Please make sure that your test results are submitted from an up-to-date calibrated tester – failure to do so will mean that your results will not be accepted and the 25 year warranty will not be provided.
- The tester shall be calibrated annually, preferably by the test equipment manufacturer. If a third party is used a PDF copy of the certificate shall be submitted with every warranty application.
- The test equipment must support the standard for which the warranty is being sought.
- The test results must be submitted in the tester manufacturer format (eg. '.flw' FlukeLinkWare) and include full plot graph data.
- PDF test results are NOT accepted.
- The test results must be sorted within the results file by Building, Floor, Communications Room, Cabinet, Panel for easy analysis
- Only submit results that apply for this warranty application

Verification

Once the results have been uploaded, these will be sent through to our technical team.

They will check the online application and compare and verify the test results (please ensure that the test results are provided in the relevant format as stated above). Applications will be processed within 48 hours from the receipt of the test data being supplied in the correct format.

Once a warranty has been approved a notification will be sent to you by email to advise you that the warranty has been issued and you will be able to visit the warranty area to download your certificate or to send a link directly to your end user client.

Pending Warranties

Any submitted warranty applications can be viewed by clicking on the '**Pending Warranties**' folder.

Approved Warranties

You can view any of your approved warranty applications (submitted from March 2012) by visiting the 'Approved Warranties' folder in the partner area. These details are held in a completely secure area that is only accessible by those members of your staff that have been given access to the Excel Partner area, and the Excel technical team. However, it is possible for you to copy and paste the link to the pdf of the warranty certificate to email directly to your customer if you wish.

Rejected Warranties

If the warranty application is rejected it will be listed in the '**Rejected Warranties**' area and a notification will be sent to you by email advising you of the reason(s) for rejection. You will then have the ability to update the information and progress the warranty through to completion.

Please note that all rejected warranties will automatically be removed from the system after 60 days.

For any questions or queries relating to the warranty application process please email these through to warranties@excel-networking.com

Copper (Horizontal 4 pair)

100% testing shall be carried out on:

- Horizontal links (patch panel to outlet) – test as permanent link
- Horizontal Links with Consolidation Points (CP) – test from Patch Panel to CP as 3 connector Permanent link (PL3)
- Patch Panel to Patch Panel links are to be tested as Permanent Links
- Switch/Harness or MPT Links (Patch Panel to RJ45 plug) – test as a modified permanent link (PL at main and MPTL adaptor at remote). Document modified links on the application if tested separately to permanent link. Modified shall be made from Excel patch leads or cable (solid or stranded) and Patch Panel, Jack/Module and field terminated RJ45 plugs.
- Full OEM results submitted for each link
- Results to be submitted in the original tester format (see previous page)

Copper (Vertical Cat3/CW Multipair)

Links that are submitted for warranty must include:

- Length
- Continuity report
- Cable construction type and pair data

Fibre Optic Link

- Tier 1 certification must be completed and submitted for each fibre link. Each fibre core shall be tested in each direction at both wavelengths and the results combined if stored electronically
- Test equipment that stores the results electronically shall be presented in the manufacturers format
- Where test equipment tests against a specific standard, care shall be taken to ensure that the correct one is selected
- Details of the construction and core count of the fibre cable are needed
- Full OEM results must be submitted for each core
- Results to be submitted in the original tester format (see previous page)

Tier 1 certification refers to the use of a light source and power meter to perform continuity and loss testing of the installed links. The length of the fibre is also measured

Class I/II channels/Category 8 warranty

An installation must be tested to Category 8 performance and 100% link tests must be performed using Level VI test equipment as a minimum. Either a permanent link adapter or approved manufacturer's test head must also be used. The approved testers for submission of an Excel Warranty application are available at <http://www.excel-networking.com/support/25-year-warranty/>



Requirements for Class G Class I/II channels/Category 8 warranty

- Excel patch cords must be installed
- Test to ANSI/TIA Cat 8, ISO11801 Class I/II EN50173 Class I/II

Successful warranty applications will receive a 25-year certification confirming:

- Compliance with ISO11801 2017 1st edition
- Support of current and future Cat8 Class I/II protocols.
- Guaranteed backward compatibility of Cat8.1/8.2 channel

For a full list of protocols supported by the Excel Category 8 warranty, please refer to appendix A detailed on the Excel website

Class E_A/Category 6_A warranty

An installation must be tested to Category 6_A performance and 100% link tests must be performed using Level III test equipment as a minimum. Either a permanent link adapter or approved manufacturer's test head must also be used. The approved testers for submission of an Excel Warranty application are available at <http://www.excel-networking.com/support/25-year-warranty/>



Requirements for Class E_A/Category 6_A warranty

- Excel patch cords must be installed
- Test to ANSI/TIA, ISO11801 Class E_A EN50173 Class E_A

Successful warranty applications will receive a 25-year certification confirming:

- Compliance with ISO11801 2000 2nd edition
- Support of current and future Class E_A protocols
- Guaranteed backward compatibility

For a full list of protocols supported by the Excel Category 6_A warranty, please refer to appendix B detailed on the Excel website

Class E/Category 6 warranty

An installation must be tested to Category 6 performance and 100% link tests must be performed using Level III test equipment as a minimum. Either a permanent link adapter or approved manufacturer's test head must also be used. The approved testers for submission of an Excel Warranty application are available at <http://www.excel-networking.com/support/25-year-warranty/>



Requirements for Class E/Category 6 warranty

- Excel patch cords must be installed.
- Test to ANSI/TIA, ISO11801 Class E or EN50173 Class E

Successful warranty applications will receive a 25-year certification confirming:

- Compliance with ISO11801 2002 2nd edition
- Support of current and future Class E protocols.
- Guaranteed backward compatibility

For a full list of protocols supported by the Excel Category 6 warranty, please refer to appendix C detailed on the Excel website



Category 5e warranty

An installation must be tested to Class D/Category 5e performance and 100% link tests must be performed using Level III test equipment as a minimum. Either a permanent link adapter or approved manufacturer's test head must also be used.

The approved testers for submission of an Excel Warranty application are available at

<http://www.excel-networking.com/support/25-year-warranty/>

- Excel patch cords must be installed.
- Test to ANSI/TIA, ISO11801 Class D or EN50173 Class D

Successful warranty applications will receive a 25-year certification confirming:

- Compliance with ISO11801 2002 2nd edition.
- Support of current and future Class D protocols.
- Guaranteed backward compatibility.

For a full list of protocols supported by the Excel Category 5e warranty, please refer to appendix D.



Fibre optic warranty

Tier 1 testing must be completed for each link (in both directions) that requires a warranty. Test results can be submitted directly from the tester used.



Multipair warranty

Links that are submitted for warranty must include:

- Length
- Continuity report
- Cable construction type and pair data



Conditions of Warranty

The products, and where appropriate the labour, are covered by the warranty from the point of acceptance by Excel and not before. The warranty covers the products and installation as detailed above. The warranty excludes any form of consequential loss of any kind. The warranty is subject to the Mayflex Group Limited Conditions of Sale. The warranty is in addition to statutory rights. This warranty is governed by and interpreted in accordance with English law and the parties agree to submit to the non-exclusive jurisdiction of the English courts.

Appendix A

Excel Protocols List – Category 8/Class I/II – defined 2GHz (2000MHz)

Data systems supported include, but are not limited to:

Name	Application	Specification
25/40 Gigabit Ethernet	25G/40GBASE-T	IEEE 802.3bq
10 Gigabit Ethernet	10GBASE-T	IEEE 802.3an
Gigabit Ethernet, IEEE 802.3ab	CSMA/CD 1000BASE-T b	IEEE 802.3 clause 40
Fast Ethernet IEEE 802.3u	CSMA/CD 100BASE-TX b	IEEE 802.3 clause 25
Ethernet: IEEE 802.3i	CSMA/CD 10BASE-T a	IEEE 802.3
Power over Ethernet Plus	PoE-plus	IEEE 802.3at
Power over Ethernet	PoE	IEEE 802.3af
Power over Ethernet Plus Plus	POE++ (Type 4)	IEEE 802.3bt
Twisted pair Fibre Channel 1G	Fibre Channel 1Gb/s	INCITS 435
ATM-1200/Category 6	ATM LAN 1,2 Gbit/s	IP/MPLS Forum af-phy-0162.000
ATM-155/Category 5	ATM LAN 155,52 Mbit/s	IP/MPLS Forum af-phy-0015.000
ATM-52/Category 3	ATM LAN 51,84 Mbit/s	IP/MPLS Forum af-phy-0018.000
ATM-25/Category 3	ATM LAN 25,60 Mbit/s	IP/MPLS Forum af-phy-0040.000
Firewire/Category 5	Firewire 100 Mbit/s	IEEE 1394b
High Speed Token Ring	Token Ring 100 Mbit/s	IEEE 802.5t
Token Ring	Token Ring 16 Mbit/s	IEEE 802.5
Token Ring	Token Ring 4 Mbit/s	IEEE 802.5
ISDN Primary Access (Physical Layer)	S ₁ /S ₂	ITU-T I.431
ISDN	S ₀ Star	EN 50098-1:1998/A1 (ITU-T I.430)
ISDN Basic Access (Physical Layer)	S ₀ Point-to-Point	ITU-T I.430
ISDN Basic Access (Physical Layer)	S ₀ -Bus (extended)	ITU-T I.430
Voice	X.21	ITU-T X.21
Voice	V.11	ITU-T V.11
Voice	PBX	National Requirements



Appendix B

Excel Protocols List – Category 6_A/Class E_A – defined 500 MHz

Data systems supported include, but are not limited to:

Name	Application	Specification
10 Gigabit Ethernet	10GBASE-T	IEEE 802.3an
Gigabit Ethernet, IEEE 802.3ab	CSMA/CD 1000BASE-T b	IEEE 802.3 clause 40
Fast Ethernet IEEE 802.3u	CSMA/CD 100BASE-TX b	IEEE 802.3 clause 25
Ethernet: IEEE 802.3i	CSMA/CD 10BASE-T a	IEEE 802.3
Power over Ethernet Plus	PoE-plus	IEEE 802.3at
Power over Ethernet	PoE	IEEE 802.3af
Power over Ethernet Plus Plus	POE++ (Type 4)	IEEE 802.3bt
Twisted pair Fibre Channel 1G	Fibre Channel 1Gb/s	INCITS 435
ATM-1200/Category 6	ATM LAN 1,2 Gbit/s	IP/MPLS Forum af-phy-0162.000
ATM-155/Category 5	ATM LAN 155,52 Mbit/s	IP/MPLS Forum af-phy-0015.000
ATM-52/Category 3	ATM LAN 51,84 Mbit/s	IP/MPLS Forum af-phy-0018.000
ATM-25/Category 3	ATM LAN 25,60 Mbit/s	IP/MPLS Forum af-phy-0040.000
Firewire/Category 5	Firewire 100 Mbit/s	IEEE 1394b
High Speed Token Ring	Token Ring 100 Mbit/s	IEEE 802.5t
Token Ring	Token Ring 16 Mbit/s	IEEE 802.5
Token Ring	Token Ring 4 Mbit/s	IEEE 802.5
ISDN Primary Access (Physical Layer)	S ₁ /S ₂	ITU-T I.431
ISDN	S ₀ Star	EN 50098-1:1998/A1 (ITU-T I.430)
ISDN Basic Access (Physical Layer)	S ₀ Point-to-Point	ITU-T I.430
ISDN Basic Access (Physical Layer)	S ₀ -Bus (extended)	ITU-T I.430
Voice	X.21	ITU-T X.21
Voice	V.11	ITU-T V.11
Voice	PBX	National Requirements

Appendix C

Excel Protocols List – Category 6/Class E – defined 250 MHz

Data systems supported include, but are not limited to:

Name	Application	Specification
Gigabit Ethernet, IEEE 802.3ab	CSMA/CD 1000BASE-T b	IEEE 802.3 clause 40
Fast Ethernet IEEE 802.3u	CSMA/CD 100BASE-TX b	IEEE 802.3 clause 25
Ethernet: IEEE 802.3i	CSMA/CD 10BASE-T a	IEEE 802.3
Power over Ethernet Plus	PoE-plus	IEEE 802.3at
Power over Ethernet	PoE	IEEE 802.3af
Power over Ethernet Plus Plus	POE++ (Type 4)	IEEE 802.3bt
Twisted pair Fibre Channel 1G	Fibre Channel 1Gb/s	INCITS 435
ATM-1200/Category 6	ATM LAN 1,2 Gbit/s	IP/MPLS Forum af-phy-0162.000
ATM-155/Category 5	ATM LAN 155,52 Mbit/s	IP/MPLS Forum af-phy-0015.000
ATM-52/Category 3	ATM LAN 51,84 Mbit/s	IP/MPLS Forum af-phy-0018.000
ATM-25/Category 3	ATM LAN 25,60 Mbit/s	IP/MPLS Forum af-phy-0040.000
Firewire/Category 5	Firewire 100 Mbit/s	IEEE 1394b
High Speed Token Ring	Token Ring 100 Mbit/s	IEEE 802.5t
Token Ring	Token Ring 16 Mbit/s	IEEE 802.5
Token Ring	Token Ring 4 Mbit/s	IEEE 802.5
ISDN Primary Access (Physical Layer)	S ₁ /S ₂	ITU-T I.431
ISDN	S ₀ Star	EN 50098-1:1998/A1 (ITU-T I.430)
ISDN Basic Access (Physical Layer)	S ₀ Point-to-Point	ITU-T I.430
ISDN Basic Access (Physical Layer)	S ₀ -Bus (extended)	ITU-T I.430
Voice	X.21	ITU-T X.21
Voice	V.11	ITU-T V.11
Voice	PBX	National Requirements
Voice	PBX	National Requirements

Appendix D

Excel Protocols List – Category 5e/Class D – defined 100 MHz

Data systems supported include, but are not limited to:

Name	Application	Specification
Gigabit Ethernet, IEEE 802.3ab	CSMA/CD 1000BASE-T b	IEEE 802.3 clause 40
Fast Ethernet IEEE 802.3u	CSMA/CD 100BASE-TX b	IEEE 802.3 clause 25
Ethernet: IEEE 802.3i	CSMA/CD 10BASE-T a	IEEE 802.3
Power over Ethernet Plus	PoE-plus	IEEE 802.3at
Power over Ethernet	PoE	IEEE 802.3af
Power over Ethernet Plus Plus	POE++ (Type 4)	IEEE 802.3bt
Twisted pair Fibre Channel 1G	Fibre Channel 1Gb/s	INCITS 435
ATM-155/Category 5	ATM LAN 155,52 Mbit/s	IP/MPLS Forum af-phy-0015.000
ATM-52/Category 3	ATM LAN 51,84 Mbit/s	IP/MPLS Forum af-phy-0018.000
ATM-25/Category 3	ATM LAN 25,60 Mbit/s	IP/MPLS Forum af-phy-0040.000
Firewire/Category 5	Firewire 100 Mbit/s	IEEE 1394b
High Speed Token Ring	Token Ring 100 Mbit/s	IEEE 802.5t
Token Ring	Token Ring 16 Mbit/s	IEEE 802.5
Token Ring	Token Ring 4 Mbit/s	IEEE 802.5
ISDN Primary Access (Physical Layer)	S ₁ /S ₂	ITU-T I.431
ISDN	S ₀ Star	EN 50098-1:1998/A1 (ITU-T I.430)
ISDN Basic Access (Physical Layer)	S ₀ Point-to-Point	ITU-T I.430
ISDN Basic Access (Physical Layer)	S ₀ -Bus (extended)	ITU-T I.430
Voice	X.21	ITU-T X.21
Voice	V.11	ITU-T V.11
Voice	PBX	National Requirements
Voice	PBX	National Requirements
Voice	PBX	National Requirements



European Headquarters

Excel House
Junction Six Industrial Park
Electric Avenue
Birmingham B6 7JJ
England

T: +44 (0)121 326 7557

E: sales@excel-networking.com

Middle East & Africa Headquarters

PO Box 293695
Office 22A/B, AU (Gold) Tower
Jumeirah Lakes Towers (JLT)
Dubai
United Arab Emirates

T: +971 4 421 4352

E: mesales@mayflex.com



Certificate No. FS 547274



Certificate No. EMS 542863

