

## Structured Networks...

At Spear we understand the importance of your I.T infrastructure and the damaging and costly consequences any failure of this mission critical equipment can have. We take great care when specifying the electrical installation to these areas; paying special regard to harmful voltage spikes, damaging harmonics and background noise on the earthed electrical installation. We design around these issues with knowledge experience and great skill ensuring that when your systems are commissioned and operating they stay fault free and reliable.

**UPS** – Spear Electrical design and install networked Uninterruptable Power Supplies to ensure that in the event of a power failure you are notified and afforded sufficient time to rectify any issues before your equipment comes off-line.

**SPD** – Surge protective devices protect your installation from harmful voltage spikes. These cost effective devices have no moving parts require no maintenance and will last the lifetime of your installation.

**T.H.D (Total Harmonic Distortion)** – We supply and install filters which protect your equipment from damaging harmonic distortion, this phenomenon can cause intermittent faults in your power supplies and can have a damaging effect on your I.T equipment.



Category	Standard	Data rate	Frequency	# Of cores
Cat 5	100BASE-TX	100 Mbit	100 MHz	4 or 8
Cat 5e	1000BASE-TX	1 Gbit	100 MHz Duplex	8
Cat 6	EIA/TIA 568B2.1	1 – 10 Gbit*	250 MHz	8
Cat 6A	10GBASE-T	10 Gbit	500 MHz	8
Cat 7	10GBASE-T	10 Gbit	600 MHz	8
Cat 7A	10GBASE-T	10 Gbit	1000 MHz	8
Cat 8	40GBASE-T	40 Gbit	1600 – 2000 MHz	8

“Spear structured network installations are tested, certified and issued with a 25 year manufacturer’s warranty protecting you from premature failure and guaranteeing you the highest standards of installation are achieved.