

PowerWise[®] + Clarity[®]

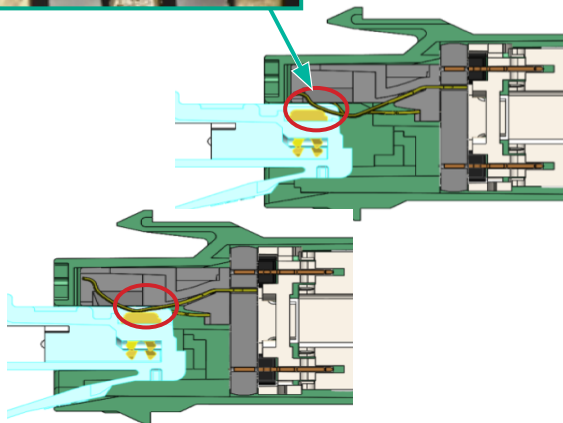
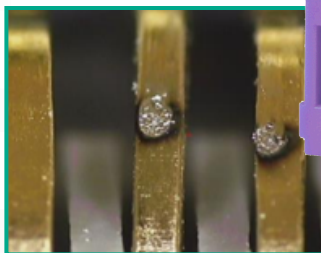
The ultimate solution for 4PPoE Applications

The digital building is making an unprecedented impact on how networks are utilized, managed and operated. With the proliferation of smart devices converging onto the network, Power-over-Ethernet is rapidly becoming the preferred method to deliver power, along with data, to intelligent end-points. As power requirements continue to increase, it is important to select products that have been engineered to deliver premium power and data performance. Legrand and Superior Essex components are designed to deliver performance above the latest PoE standards, especially when used together in a high-performance system.

Legrand Clarity Connectivity is Optimized for PoE

- Contact designs locate arcing away from the critical contact area in a fully mated connection
- Designed to handle 1.5 amps or greater per circuit trace, offering margin over IEC recommendations
- 50 micro inch gold plating of the mated surfaces extends the life and performance of the connection
- Full compliance with IEC 60512-99 recommendations

Spark Gap erosion located away from the critical contact area.

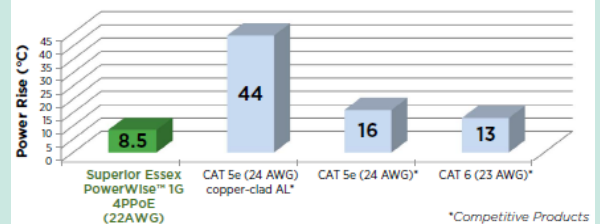


Arcing is inevitable, but in a fully mated connection the plug makes contact with the jack in the critical contact area, away from any spark gap erosion.

Superior Essex PowerWise Cable is Optimized for PoE

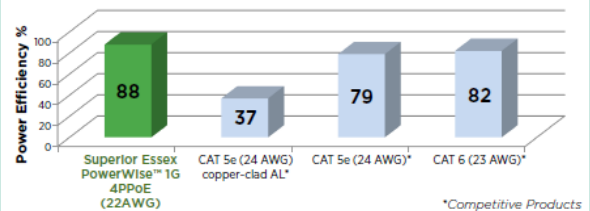
- Compliant to IEEE 802.3bt draft 3.0 for Types 3 and 4
- Energy savings of 54% vs. CAT 5e and 41% vs. CAT 6
- 100% FEP insulation yields longest system life span
- 0.23 inch Nominal O.D.
- Part of nCompass high performance structured cabling systems
- Sustainably manufactured in a 3rd party certified Zero Waste to landfill facility

Maximum Temperature Rise in a 100 Cable Bundle



Lowest Temperature Rise via 22 AWG Conductors

Power Efficiency - 100 m Length



Most Energy Efficient Cable on the Market
88% Power Efficiency

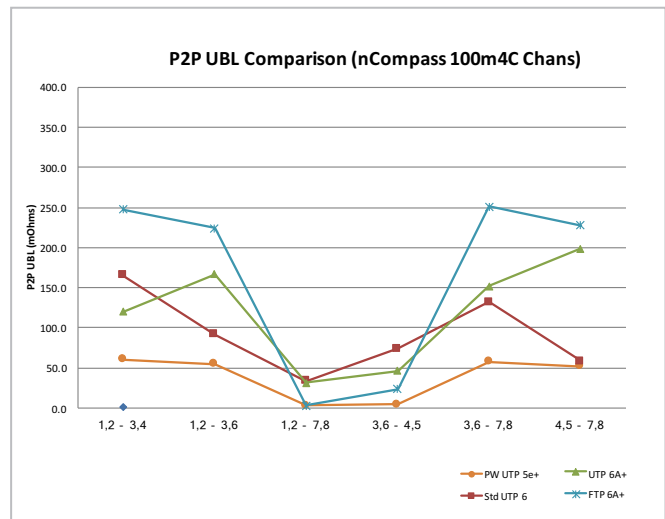
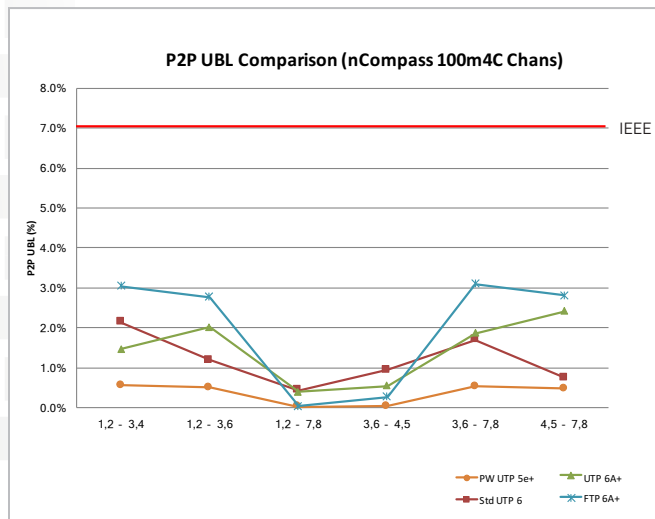


PowerWise[®] + Clarity[®]

Two technology and market leaders, Legrand and Superior Essex, offer the first and best solution for channel Pair to Pair DC Resistance Unbalance requirements as defined by IEEE 802.3bt draft 3.0. Clarity connectivity combined with PowerWise 1G cable offers premium channel performance with even more headroom than Category 6 and 6a systems, maximizing performance while keeping costs low.

Channel Type	Wire Pairs (% Unbalance P2P)						Max
	1,2 - 3,4	1,2 - 3,6	1,2 - 7,8	3,6 - 4,5	3,6 - 7,8	4,5 - 7,8	
PowerWise UTP 5e+	0.57%	0.51%	0.03%	0.05%	0.54%	0.48%	0.57%
Std UTP 6	2.14%	1.20%	0.44%	0.94%	1.70%	0.76%	2.14%
UTP 6A+	1.47%	2.02%	0.40%	0.56%	1.86%	2.42%	2.42%
FTP 6A+	3.05%	2.77%	0.04%	0.28%	3.10%	2.81%	3.10%

Channel Type	Wire Pairs (Unbalance P2P - mOhms)						Max
	1,2 - 3,4	1,2 - 3,6	1,2 - 7,8	3,6 - 4,5	3,6 - 7,8	4,5 - 7,8	
PowerWise UTP 5e+	61.0	55.0	3.0	5.0	58.0	52.0	61.0
Std UTP 6	165.7	91.7	33.5	74.0	132.2	58.2	165.7
UTP 6A+	120.3	166.7	32.0	46.5	152.3	198.7	198.7
FTP 6A+	247.6	224.0	3.5	23.7	251.1	227.5	251.1



When evaluating a PoE system, it's important to analyze DCR Unbalance within a pair, pair to pair, and overall DCR to ensure the optimum delivery of power and data. A lower DCR P2P UBL reading on a field test indicates more headroom, which means more power efficiency without data degradation.