

EVERYTHING 

Connect. Control. Converge.

Product Selector

Choose the Right
Tool for the Job



LANmark™-6 CA 6.4 75°C HPD

BERK-TEK

Short-term lease, covers the basics



1G

EVERYTHING IP

Connect. Control. Converge.

Choose the Right Tool for the Job

LANmark™-1000 CA 7.3 75°C HPD

BERK-TEK

Good for higher bandwidth (2.5G) and high PoE



2.5G

Berk-Tek®

A NEXANS COMPANY

www.berktek.us/EverythingIP

LANmark™-2000 CA 8.0 90°C HPD

BERK-TEK

Better for extreme bandwidth (5.0G) and high PoE



5G

LANmark™-XTP CA 8.6 90°C HPD

BERK-TEK

Only choice for wireless; Best for high PoE



10G

100W

802.11ac

BANDWIDTH

POWER

WIRELESS

01011100110010000001



CA Score : Testing for Real World Performance

Traditional testing methods do not accurately measure the performance of cabling under the strain of increasing bandwidth demand and high power PoE.

The CA Score goes beyond standard decibel-based testing to real-world scenarios that are designed to measure how well cables perform under the stress of converging applications. The testing shows that cables with higher CA Scores perform better by protecting your IP traffic from the effects of heat and noise.

For more information, visit www.berktek.us/EverthingIP

Berk-Tek's Converged Application (CA) Score is calculated using a proprietary algorithm that combines the results of the following tests over a specially designed 100 meter, four connector channel:

Mean Opinion Score (MOS) – A quality of service metric used mainly to measure VoIP.

Frame Error Rate (FER) – A very rigorous test for IP data applications.

Media Loss Rate (MLR) – A quality of service metric used to measure IP video (IPTV).

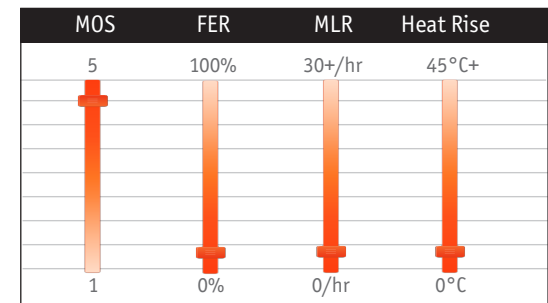
Heat Rise from PoE – A measurement of how efficiently cabling can dissipate heat.

A cable's CA Score is an indicator of how well IP traffic is protected, as well as how much heat rise there is when the cable undergoes PoE testing. The score is represented by a numeric value between 1 and 10, with 1 being the lowest and 10 being the highest. In reality, a score of 1 is not possible because it would represent no connection and catastrophic heat rise. Likewise, a score of 10 is unattainable because it would mean perfect performance and zero heat rise with high power PoE. Consequently, CA Scores range between 2 and 9, as illustrated in this table:

CA score	Score	< 3.6	3.6 - 5.5	5.6 - 6.5	6.6 - 7.5	7.6 - 8.5	8.6 +
	Performance	Unacceptable	Poor	Limited	Good	Better	Best
	Heat Rise	Severe	Significant	Moderate	Moderate	Moderate	Low

Before CA Score testing was performed, all channels were tested with Fluke and passed with margin.

What does the CA Score tell you? A performance rating of "Unacceptable" (less than 3.6) means that there are consistent noticeable flaws (dropped frames, media loss, etc) in the applications tested. As you move towards higher scores, you notice fewer flaws until you reach a score of 9, which is almost flawless. PoE testing is also an important factor; cables that experience less temperature rise can achieve higher CA Scores. Because the CA Score algorithm assigns weights to MOS, FER, MLS and PoE heat rise test results, there are multiple ways to achieve a specific CA Score. For example, the CA Score algorithm weights the results of MOS and MLR higher than FER due to the time-sensitive protocols used within VoIP and video applications, such as RTP and UDP, where lost frames are not retransmitted.



An example of what the MOS, FER, MLR and PoE Heat Rise scores can look like for a cable with a CA Score of 8.6.



LANmark™-6 : Cat 6 Basic Performance

Saving time and money is as easy as 1 2 3

1

Minimize [*] Passes

LANmark-6 has a best-in-class 2dB of headroom over the Cat 6 standard on several parameters (NEXT, PSNEXT, ACR, PSACR), which means no more wasted time reterminating [*] passes.

2

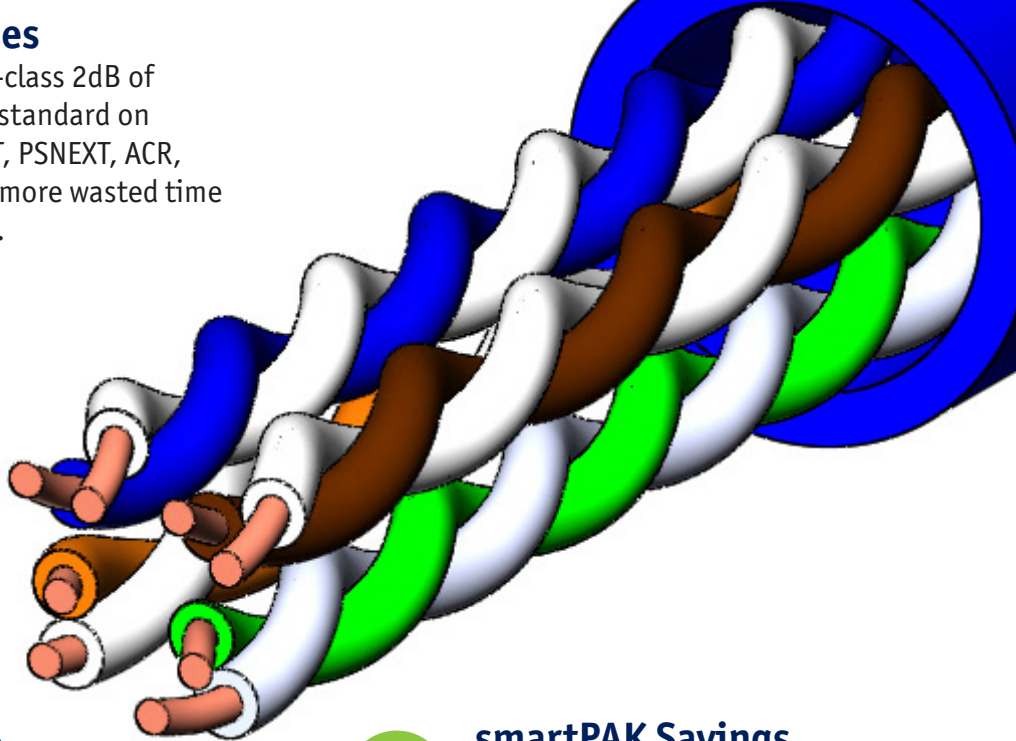
No Spline Saves Time

Separating the pairs and cutting away the spline takes several seconds for each termination. Over time, those seconds turn to minutes and hours you could be saving.

3

smartPAK Savings

Use our innovative smartPAK 1,500 foot packaging to save scrap and reduce your trips to the truck by 50%. We found that you can add \$2,100 to your bottom line using smartPAK for a 150,000 foot project.



www.berktek.us/EverythingIP

To see for yourself how much money you could be saving, use our smartPAK calculator tool now.

Click here 





LANmark™-1000 : Cat 6 Good Performance

Protecting your IP traffic is as easy as ① ② ③

1

Proprietary Materials

The TEK Center developed proprietary insulating compounds that protect your IP traffic from the effects of heat from PoE and other sources.

2

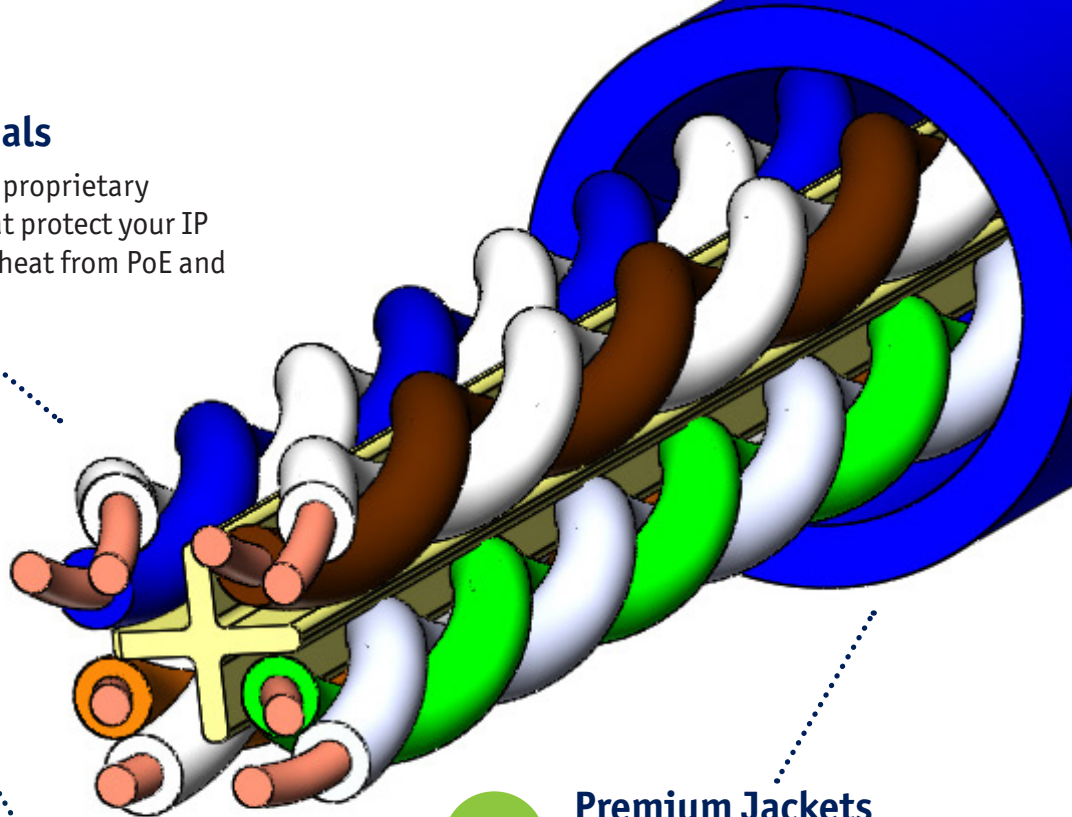
TEK-Twist Technology

Berk-Tek's proprietary algorithm controls twist variation for unsurpassed noise protection and optimized converged application performance in UTP designs.

3

Premium Jackets

Berk-Tek uses only premium jacketing compounds to ensure your IP traffic is protected from the stress and strain of installation in the real world.



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LANmark™-2000 : Cat 6 Better Performance

Protecting your IP traffic is as easy as 1 2 3

1

Proprietary Materials

The TEK Center developed proprietary insulating compounds that protect your IP traffic from the effects of heat from PoE and other sources.

2

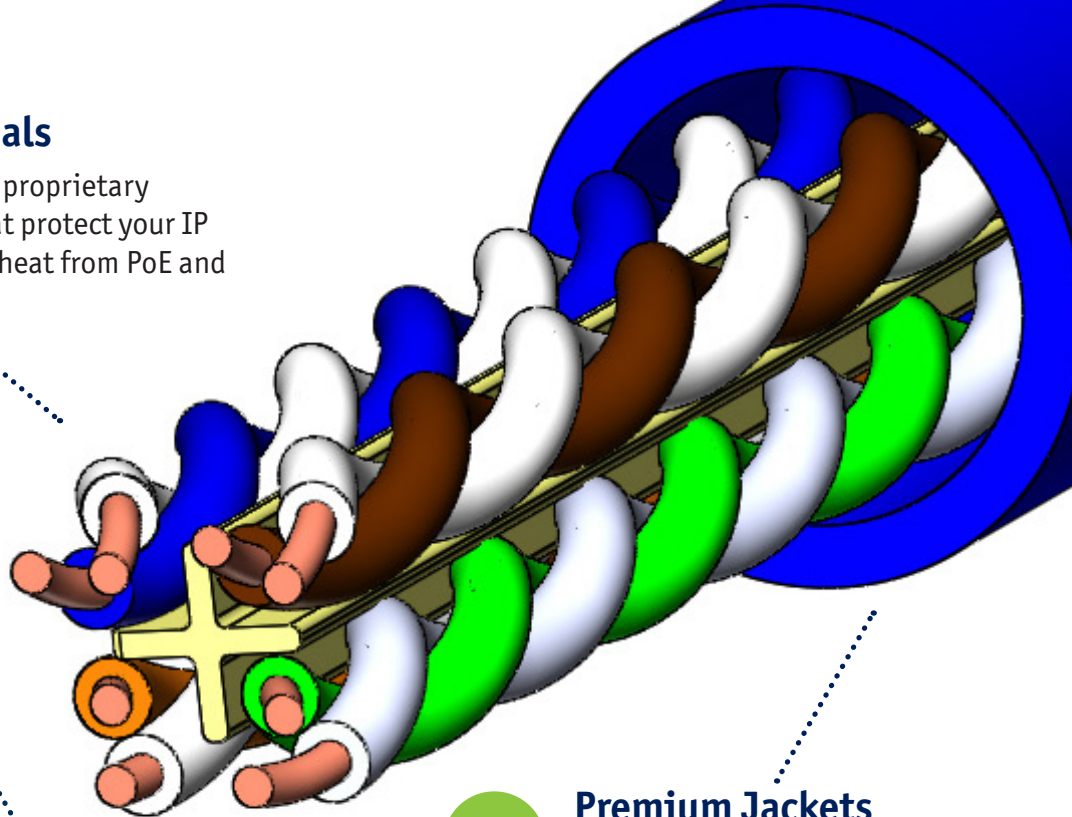
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LANmark 2000's cable core (four twisted pairs with center filler) is designed for absolute premium Category 6 performance. This product has the industry's best CA Score and has an incredible 10dBs of headroom over the Cat 6 standard.



LANmark™-XTP : Cat 6A Best Performance

Protecting your IP traffic is as easy as ① ② ③

1

Cross Talk Prevention

Built-in Cross Talk Prevention (XTP) shielding technology allows for outstanding signal isolation, protecting your IP traffic from outside interference. The intermittent spaces in the shield are designed to absorb any electrical energy (noise) running along the shield, so no grounding is required.

2

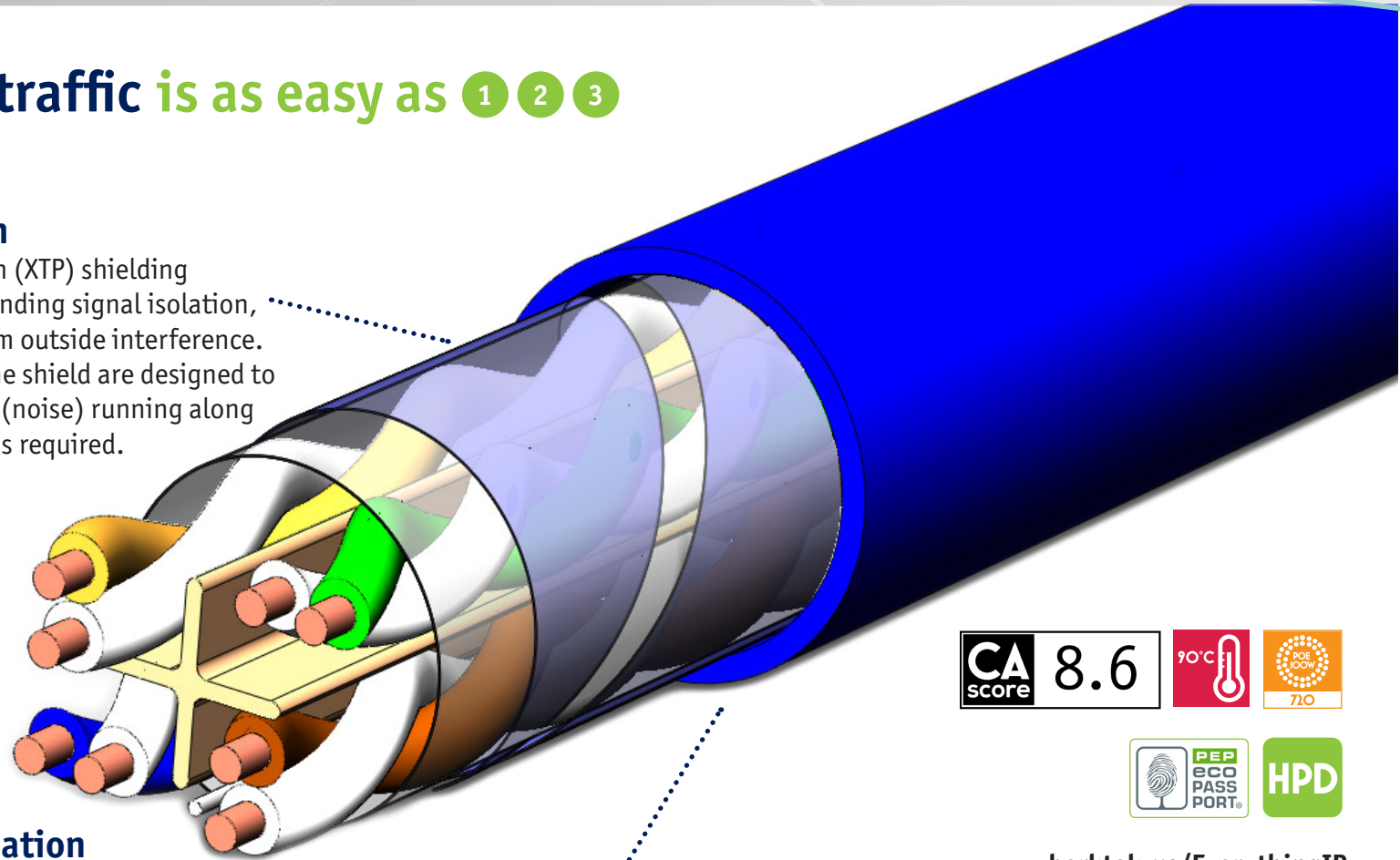
Superior Heat Dissipation

XTP shielding technology is also designed to efficiently "Get the Heat Out!" In the TEK Center's testing, the LANmark-XTP experienced 30% less heat rise under the same PoE load as a standard Category 6A UTP product with no shielding.

3

Premium Jackets

Berk-Tek uses only premium jacketing compounds to ensure your IP traffic is protected from the stress and strain of installation in the real world.



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