

Connect with
the industry's best
CAT6 and CAT5e
channel solutions!



Our CAT6 and CAT5e channel solutions far exceed the TIA/EIA specifications' performance standards!

To ensure consistent and continuing quality, Black Box participates in independent third-party ETL testing. Our proprietary, end-to-end GigaTrue® CAT6 and GigaBase® CAT5e Channel Solutions exceed all standard TIA/EIA key measurements as shown below at 250 MHz and 100 MHz, respectively.



Black Box ETL Test Results		
	GigaTrue CAT6	GigaBase CAT5e
Near-End Crosstalk (NEXT)	<i>Exceeds by 2.5 dB!</i>	<i>Exceeds by 7 dB!</i>
Attenuation to Crosstalk Ratio (ACR)	<i>Exceeds by 9 dB!</i>	<i>Exceeds by 9.6 dB!</i>
Attenuation	<i>Exceeds by 4 dB!</i>	<i>Exceeds by 2.6 dB!</i>
Power Sum ACR (PS-ACR)	<i>Exceeds by 10 dB!</i>	<i>Exceeds by 10.7 dB!</i>
Equal-Level Far-End Crosstalk (ELFEXT)	<i>Exceeds by 10.4 dB!</i>	<i>Exceeds by 8.7 dB!</i>
Power Sum ELFEXT (PS-ELFEXT)	<i>Exceeds by 11.4 dB!</i>	<i>Exceeds by 11.2 dB!</i>
Return Loss	<i>Exceeds by 9.1 dB!</i>	<i>Exceeds by 13.3 dB!</i>
Power Sum Near-End Crosstalk (PS-NEXT)	<i>Exceeds by 4.2 dB!</i>	<i>Exceeds by 8.1 dB!</i>

Eliminate the middlemen. Save with Black Box.

Manufacturers. Resellers. Installers. Why deal with everyone marking up prices every step of the way? Go direct with Black Box® and save. Ask a Black Box representative how a GigaTrue® CAT6 or GigaBase® CAT5e Channel Solution can **slash your installation costs** compared to the competition!



The best guarantees in the industry.

Our GigaTrue® CAT6 and GigaBase® CAT5e Channel Solutions are **guaranteed for life!** All components are designed to work together to provide performance that will serve you well into the future. What's more, our channel solutions come with **application assurance.** That means they will continue to operate the applications they were designed to support now and in the future.

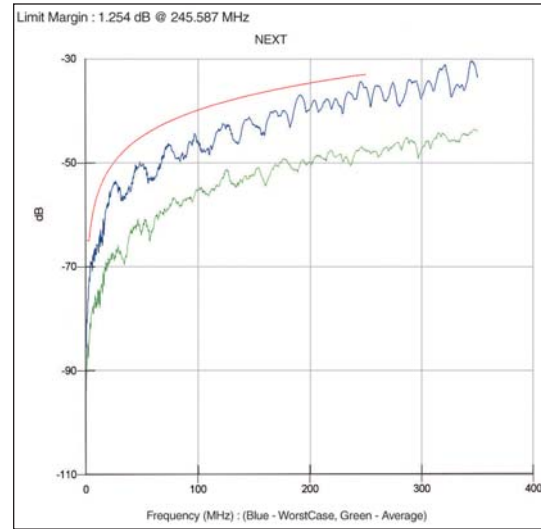
Black Box does it all!

Channel solutions that exceed CAT6 and CAT5e specs. Direct savings. Ironclad guarantees. Why go anywhere else? Ask us about installing a channel solution for you today!



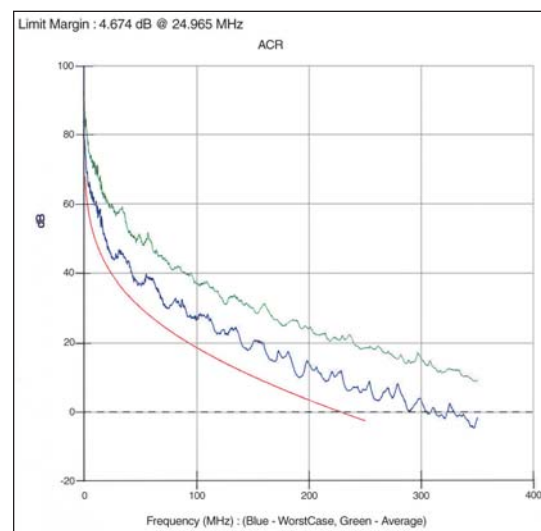
Achieve CAT6 system performance at 350 MHz and beyond!

NEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT6 Spec (dB)
1	80.2	90.4	65.0
4	69.8	80.7	63.0
8	68.8	77.5	58.2
10	66.0	77.2	56.6
16	62.3	72.3	53.2
20	58.1	69.0	51.6
25	53.9	67.8	50.0
31.25	56.3	67.2	48.4
62.5	52.7	60.2	43.4
100	46.4	55.3	39.9
200	39.8	49.9	34.8
250	35.6	47.7	33.1
350	33.7	44.1	—



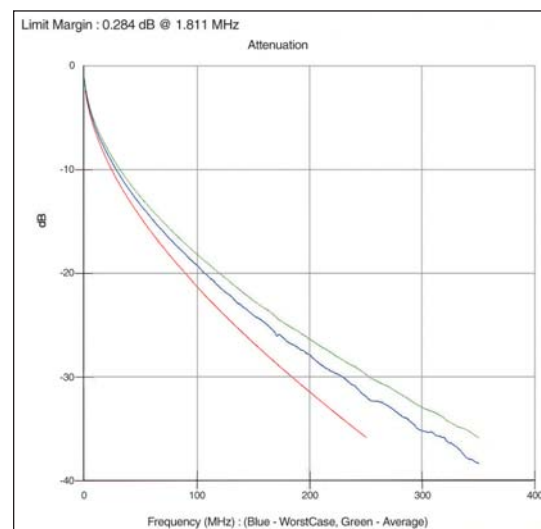
NEXT refers to **Near-End Crosstalk**. It's the measurement of an unwanted signal transmitted from one cable pair to another pair on the near end. Our CAT6 channel solution's worst case and average tests exceeded the CAT6 spec!

ACR			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT6 Spec (dB)
1	78.5	88.6	69.9
4	66.5	77.2	59.0
8	63.6	72.6	52.5
10	60.1	71.7	50.3
16	54.9	65.3	45.2
20	49.8	61.2	42.6
25	44.6	59.1	39.9
31.25	45.9	57.4	37.0
62.5	37.7	46.2	26.9
100	27.5	37.3	18.7
200	13.9	23.9	3.3
250	6.2	18.3	-2.8
350	-2.0	8.8	—



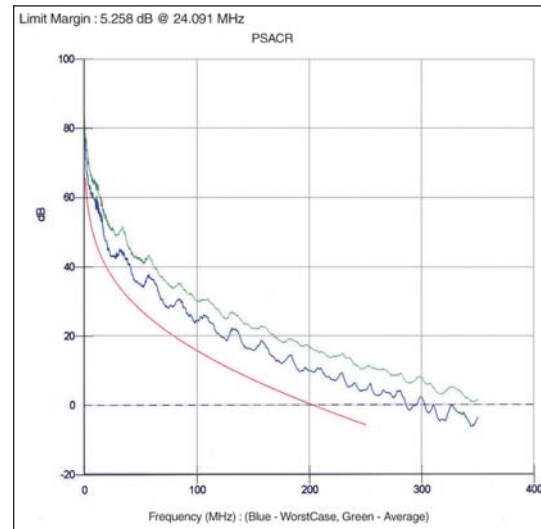
ACR refers to **Attenuation-to-Crosstalk Ratio**. It's the difference of the attenuated, or weakened, signal to NEXT. It's one factor in determining how far a signal can be transmitted. Both channel solution tests exceeded the CAT6 spec!

Attenuation			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT6 Spec (dB)
1	1.8	1.7	2.2
4	3.7	3.5	4.0
8	5.2	5.0	5.7
10	5.9	5.5	6.3
16	7.4	7.0	8.0
20	8.3	7.9	9.0
25	9.3	8.8	10.0
31.25	10.5	9.9	11.4
62.5	15.1	14.2	16.4
100	19.2	18.2	21.3
200	27.9	26.4	31.5
250	31.9	29.8	35.9
350	38.4	35.9	—



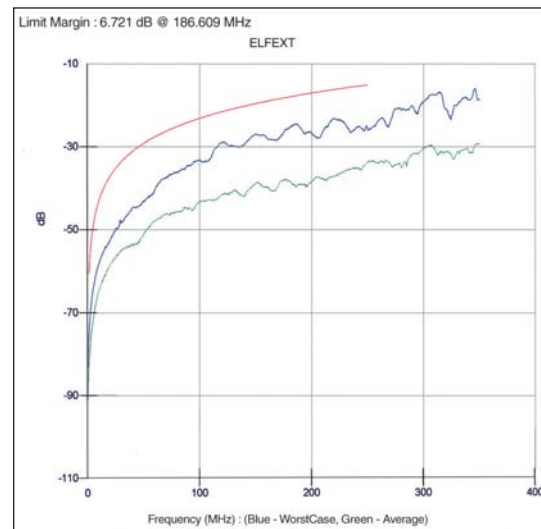
Attenuation is the decrease of the signal's strength as it travels through cable or across a system. With this measurement, a result *lower* than the CAT6 spec is desired. Our channel solution's worst case and average tests did just that.

PS-ACR			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT6 Spec (dB)
1	76.4	81.8	67.5
4	63.6	69.4	56.5
8	61.4	65.6	49.9
10	59.5	64.7	47.7
16	54.6	58.4	42.6
20	47.5	54.0	40.0
25	43.1	50.5	37.2
31.25	44.6	49.6	34.3
62.5	36.0	39.7	24.1
100	24.7	30.2	15.8
200	9.8	16.7	0.4
250	4.3	10.8	-5.7
350	-3.7	1.5	—



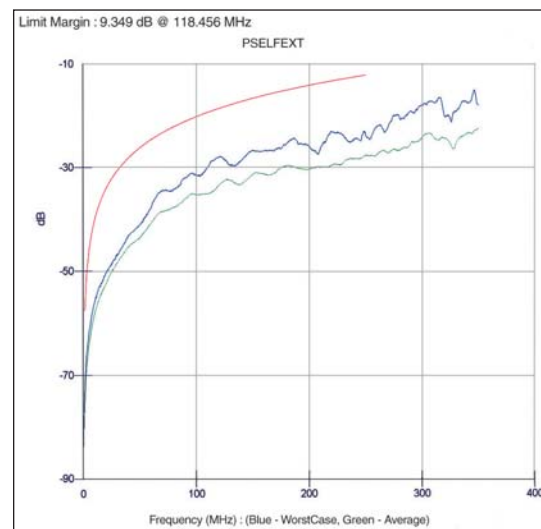
PS-ACR refers to **Power Sum Attenuation-to-Crosstalk Ratio**. This measurement determines whether a signal on the receiving end of a twisted pair is stronger than crosstalk from any other cable pairs on the receiving end. Our channel solution's worst case and average tests *outperformed* the CAT6 specification!

ELFEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT6 Spec (dB)
1	78.1	85.4	62.6
4	66.3	74.2	51.2
8	60.3	67.1	45.2
10	58.3	64.9	43.3
16	54.2	61.0	39.2
20	52.8	58.5	37.2
25	50.3	56.7	35.3
31.25	48.1	54.8	33.4
62.5	39.4	47.5	27.3
100	33.3	43.3	23.3
200	26.8	38.6	17.2
250	25.7	33.9	15.3
350	18.7	29.6	—



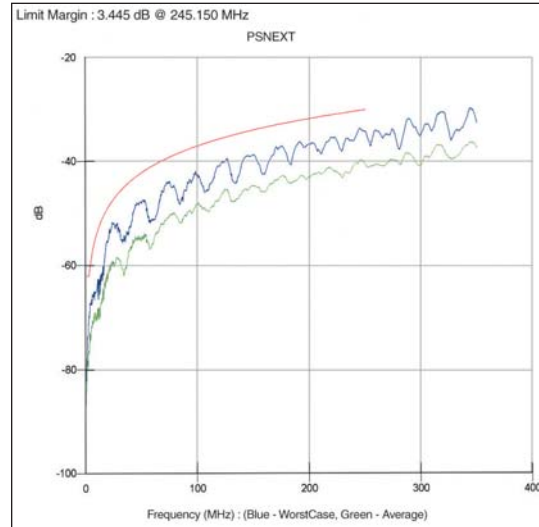
ELFEXT refers to **Equal-Level Far-End Crosstalk**. It measures Far-End Crosstalk (FEXT) in relation to the received signal level measured on the same pair. It measures interference without the effects of attenuation, thus the equal level. Our channel solution's worst case and average test scores far exceeded the CAT6 specification!

PS-ELFEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT6 Spec (dB)
1	75.6	77.7	59.6
4	63.9	66.2	48.2
8	58.0	60.4	42.2
10	56.0	58.2	40.3
16	52.3	54.3	36.2
20	50.5	52.3	34.2
25	48.5	50.2	32.3
31.25	46.7	48.0	30.4
62.5	36.5	40.1	24.3
100	31.4	35.3	20.3
200	26.1	30.4	14.2
250	23.7	27.8	12.3
350	18.1	22.7	—



PS-ELFEXT refers to **Power Sum Equal-Level Far-End Crosstalk**. It measures the total sum of all interference from pairs on the far end onto a pair on the near end without the effects of attenuation, thus the equal level. Once again, our GigaTrue® CAT6 Channel Solution's tests were far better than the CAT6 specification!

PS-NEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT6 Spec (dB)
1	78.2	83.5	62.0
4	67.2	72.9	60.5
8	66.5	70.6	55.6
10	65.0	70.2	54.0
16	61.6	65.4	50.6
20	55.5	61.9	49.0
25	52.1	59.4	47.3
31.25	54.6	59.4	45.7
62.5	50.9	53.9	40.6
100	43.2	48.4	37.1
200	36.7	43.1	31.9
250	34.4	40.5	30.2
350	32.6	37.4	—



PS-NEXT refers to **Power Sum Near-End Crosstalk**. It measures the unwanted signals from multiple pairs at the near end onto another pair at the near end. Again, the GigaTrue® CAT6 Channel Solution's worst case and average tests exceeded the CAT6 specification!

GigaTrue CAT6 550-MHz Patch Cable (UTP)

- Get high-level CAT6 performance in an end-to-end BLACK BOX® GigaTrue® channel.
- Use in a BLACK BOX® Guaranteed-for-Life Structured Cabling System with other GigaTrue channel products.

NOTE: Other lengths are also available.



Choose from 11 colors!



To order, replace the "XX" with the number assigned to each color.

Gray = 40	Red = 43	Pink = 46	Orange = 49
Blue = 41	Yellow = 44	Black = 47	White = 50
Green = 42	Beige = 45	Purple = 48	

Item	Code
GigaTrue CAT6 Channel 550-MHz Patch Cable (UTP), Snagless Boots, Stranded, 24 AWG, RJ-45, 4-Pair, T568B, PVC, Straight-Pinned	
3-ft. (0.9-m)	EVNSL6XX-0003
5-ft. (1.5-m)	EVNSL6XX-0005
7-ft. (2.1-m)	EVNSL6XX-0007
10-ft. (3.0-m)	EVNSL6XX-0010
15-ft. (4.5-m)	EVNSL6XX-0015
20-ft. (6.0-m)	EVNSL6XX-0020
30-ft. (9.1-m)	EVNSL6XX-0030
50-ft. (15.2-m)	EVNSL6XX-0050
100-ft. (30.4-m)	EVNSL6XX-0100
Custom Lengths	EVNSL6XX

GigaTrue CAT6 Patch Panels

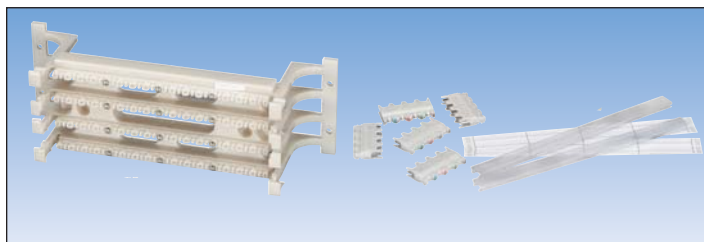


JPM612A-R4

- Universal wiring—panels come with labels for both T568A and T568B.
- Paired punchdown sequence enables pair twists within 1/2" of termination.
- Rolled-edge construction provides superior panel rigidity.

Item	Code
GigaTrue CAT6 Patch Panels, Universal Wiring	
24-Port 1U	JPM610A-R4
48-Port 2U	JPM612A-R4
96-Port 4U	JPM614A-R4
◆ Include cable ties and mounting hardware.	

CAT6 Wiring Block Kit

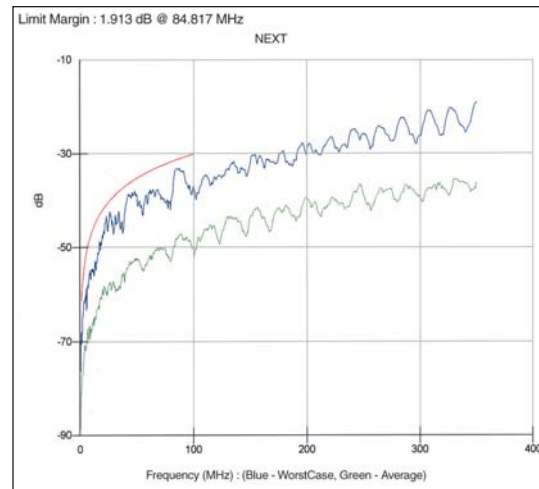


- Internal crosstalk barriers provide 360° pair isolation for superior NEXT ratings.
- Cables can be routed through the rear of the block directly to the point of termination.

Item	Code
CAT6 Wiring Block Kit, 64-Pair	JP061
◆ Includes (1) wiring block with detachable legs, connecting blocks, label holders, and labels.	

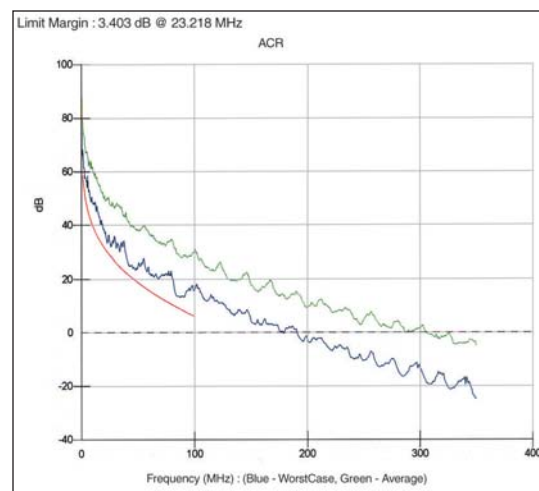
Proven CAT5e system performance at 250 MHz and beyond!

NEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT5e Spec (dB)
1	68.4	81.5	62.7
4	61.8	70.8	53.5
8	55.7	67.7	48.6
10	55.2	67.8	47.0
16	51.3	62.7	43.6
20	48.4	59.0	42.0
25	44.7	58.3	40.3
31.25	43.3	59.0	38.7
62.5	38.5	51.8	33.6
100	37.1	50.6	30.1
250	25.8	38.9	—
350	19.0	36.3	—



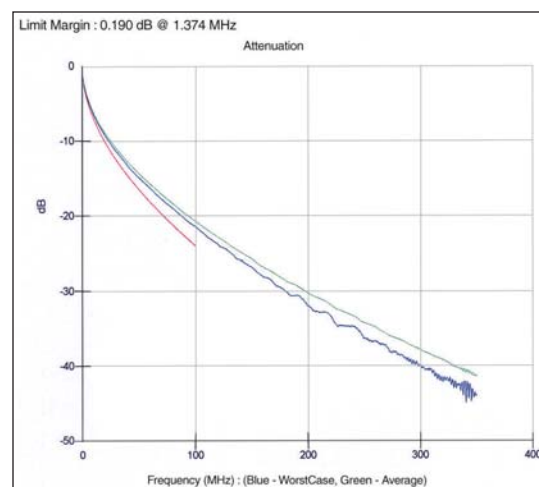
NEXT refers to **Near-End Crosstalk**. It's the measurement of an unwanted signal transmitted from one cable pair to another pair on the near end. Our channel solution's worst case and average tests exceeded the CAT5e spec!

ACR			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT5e Spec (dB)
1	66.4	79.5	60.4
4	58.0	66.9	49.1
8	49.9	62.1	42.3
10	48.7	61.6	39.9
16	43.1	54.8	34.5
20	39.1	50.1	31.8
25	34.4	48.4	28.9
31.25	31.7	47.8	25.9
62.5	21.9	35.8	15.0
100	15.7	30.0	6.1
250	-10.5	4.8	—
350	-24.7	-4.9	—



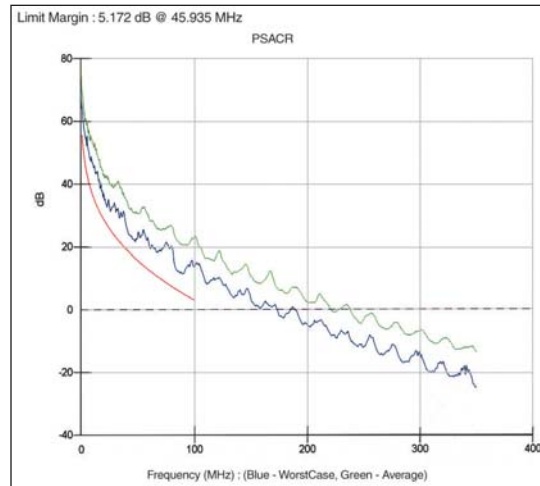
ACR refers to **Attenuation-to-Crosstalk Ratio**. It's the difference of the attenuated, or weakened, signal to NEXT. It's one factor in determining how far a signal can be transmitted. Both channel solution tests exceeded the CAT5e spec!

Attenuation			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT5e Spec (dB)
1	2.1	2.0	2.3
4	4.1	4.0	4.5
8	5.8	5.6	6.3
10	6.5	6.3	7.1
16	8.3	8.0	9.1
20	9.3	8.9	10.2
25	10.4	10.0	11.4
31.25	11.6	11.2	12.9
62.5	16.7	16.1	18.6
100	21.4	20.7	24.0
250	36.4	34.3	—
350	44.0	41.4	—



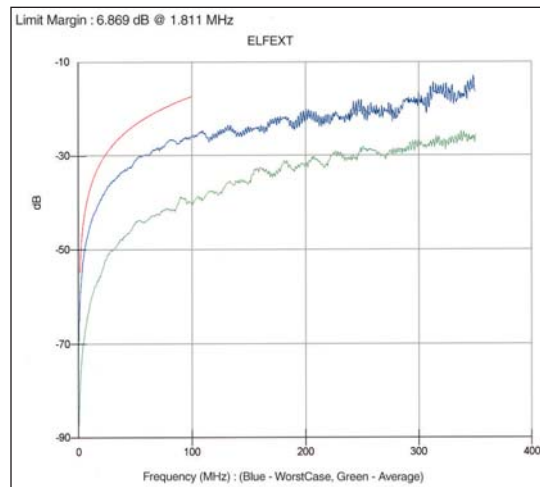
Attenuation is the decrease of the signal's strength as it travels through cable or across a system. With this measurement, a result *lower* than the CAT5e spec is desired. Our channel solution's worst case and average tests did just that.

PS-ACR			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT5e Spec (dB)
1	64.2	72.4	57.4
4	55.2	60.1	46.1
8	48.4	54.5	39.3
10	47.4	54.2	36.9
16	41.1	47.7	31.5
20	36.6	42.7	28.8
25	33.3	40.5	25.9
31.25	31.2	39.9	22.9
62.5	20.5	28.2	12.0
100	13.8	22.8	3.1
250	-12.1	-3.4	—
350	-24.8	-13.7	—



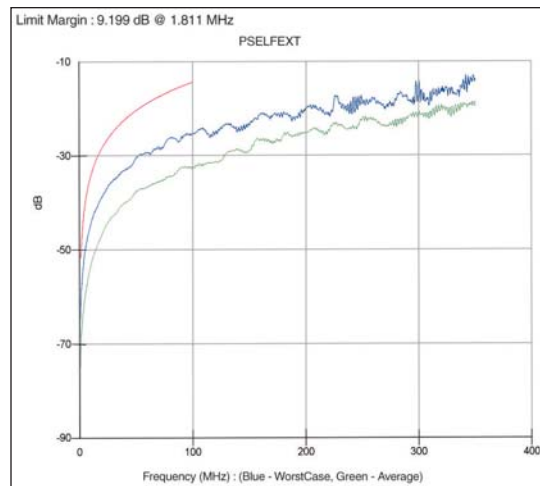
PS-ACR refers to **Power Sum Attenuation-to-Crosstalk Ratio**. This measurement determines whether a signal on the receiving end of a twisted pair is stronger than crosstalk from any other cable pairs on the receiving end. Our channel solution's worst case and average tests *outperformed* the CAT5e specification!

ELFEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT5e Spec (dB)
1	63.5	81.7	56.7
4	52.8	70.4	45.4
8	47.4	64.1	39.3
10	45.4	61.8	37.4
16	41.4	57.3	33.3
20	39.3	55.2	31.4
25	37.2	51.7	29.4
31.25	35.3	50.0	27.5
62.5	29.9	43.5	21.5
100	26.1	40.1	17.4
250	20.7	28.7	—
350	16.4	25.5	—



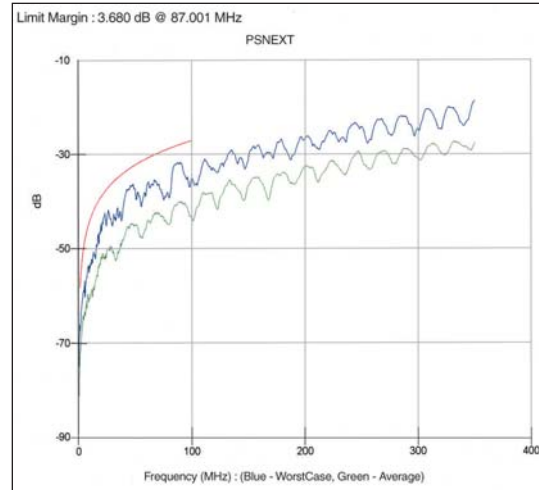
ELFEXT refers to **Equal-Level Far-End Crosstalk**. It measures Far-End Crosstalk (FEXT) in relation to the received signal level measured on the same pair. It measures interference without the effects of attenuation, thus the equal level. Our channel solution's worst case and average test scores far exceeded the CAT5e specification!

PS-ELFEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT5e Spec (dB)
1	62.9	73.1	53.7
4	52.1	61.6	42.4
8	46.7	55.6	36.3
10	44.7	53.4	34.4
16	40.8	49.1	30.3
20	38.8	46.7	28.4
25	36.8	44.2	26.4
31.25	35.0	42.5	24.5
62.5	29.7	36.3	18.5
100	25.6	32.7	14.4
250	18.8	22.3	—
350	13.7	18.6	—



PS-ELFEXT refers to **Power Sum Equal-Level Far-End Crosstalk**. It measures the total sum of all interference from pairs on the far end onto a pair on the near end without the effects of attenuation, thus the equal level. Once again, our GigaBase® CAT5e Channel Solution's tests were far better than the CAT5e specification!

PS-NEXT			
Freq. (MHz)	Black Box Worst Case (dB)	Black Box Average (dB)	CAT5e Spec (dB)
1	66.3	74.4	59.7
4	59.3	64.1	50.5
8	54.1	60.1	45.6
10	53.9	60.5	44.0
16	49.3	55.7	40.6
20	45.8	51.6	39.0
25	43.6	50.5	37.3
31.25	42.9	51.5	35.7
62.5	37.1	44.3	30.6
100	35.2	43.6	27.1
250	24.2	30.9	—
350	18.7	27.8	—



PS-NEXT refers to **Power Sum Near-End Crosstalk**. It measures the unwanted signals from multiple pairs at the near end onto another pair at the near end. Again, the GigaBase® CAT5e Channel Solution's worst case and average tests exceeded the CAT5e specification!

GigaBase 350 CAT5e Patch Cable (UTP)

- Improved near-end crosstalk (NEXT) compared to standard CAT5 cable.
- Superior construction offers significant headroom.
- Tuned-plug design means tighter twists and reduced noise.
- Enhanced performance parameters and electrical characteristics.
- Also available with straight- or cross-pinning.

NOTE: Other lengths are also available.

Choose from 11 colors!



To order, replace the "XX" with the number assigned to each color.

Gray = 80	Red = 83	Pink = 86	Orange = 89
Blue = 81	Yellow = 84	Black = 87	White = 90
Green = 82	Beige = 85	Purple = 88	



Item	Code
GigaBase® 350 CAT5e Patch Cable (UTP), Snagless Boots, Stranded, 24 AWG, RJ-45, 4-Pair, T568B, PVC, Straight-Pinned	
3-ft. (0.9-m)	EVNSLXX-0003
5-ft. (1.5-m)	EVNSLXX-0005
7-ft. (2.1-m)	EVNSLXX-0007
10-ft. (3.0-m)	EVNSLXX-0010
15-ft. (4.5-m)	EVNSLXX-0015
20-ft. (6.0-m)	EVNSLXX-0020
30-ft. (9.1-m)	EVNSLXX-0030
50-ft. (15.2-m)	EVNSLXX-0050
100-ft. (30.4-m)	EVNSLXX-0100
Custom Lengths	EVNSLXX

GigaBase CAT5e Patch Panels

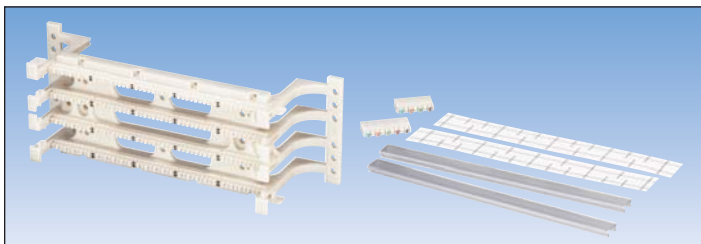


JPM906A-R4

- Meet or exceed ANSI/TIA/EIA-568-B.2 CAT5e specs.
- Universal wiring—panels are supplied with labeling for both T568A and T568B wiring.
- Rolled-edge construction provides superior panel rigidity to eliminate flex during termination.
- The IDC-110 block is redesigned with peaks to make lacing wires easier.

Item	Code
GigaBase CAT5e Patch Panels, Universal Wiring	
24-Port 1U	JPM902A-R4
48-Port 2U	JPM906A-R4
96-Port 4U	JPM910A-R4
◆ Include cable ties and mounting hardware.	

CAT5e Wiring Block Kit



- Internal crosstalk barriers provide 360° pair isolation for superior NEXT ratings.
- Cables can be routed through the rear of the block directly to the point of termination.

Item	Code
CAT5e Wiring Block Kit, 50-Pair	JP022-KIT
◆ Includes (1) wiring block with detachable legs, connecting blocks, label holders, and labels.	

Nobody does networks like Black Box.



- Serving 175,000 clients in 141 countries
- The largest staff of Registered Communications Distribution Designers (RCDDs) and BiCSi-trained technicians
- The best warranties
- Guaranteed-for-Life Structured Systems
- 24/7/365 expert Tech Support

To ensure consistent and continuing quality, Black Box participates in independent third-party ETL testing—and our ETL Verified GigaTrue® CAT6 and GigaBase® CAT5e Channel Solutions are *proven* to be among the industry's best!

Intertek ETL Semko conducted active testing on our channel solutions' components. Standards used include:

- ASTM D4566-98
- TIA/EIA-568-B.1
- ISO/IEC 11801-N696
- TIA/EIA-568-B.2
- TIA/EIA-568-B.2-1



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