

Unshielded Twisted Pair Riser Rated - CMR

## 258310333

U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; colorcoded high density polyethylene (HDPE) insulation; overall FR-PVC jacket. RoHS-2 Compliant

#### 2.0 Construction

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

#### 2.2 Insulation

- 2.1.1 Material: Ultra Low-Loss Dielectric
- 2.1.2 O.D.: 0.044" nom
- 2.1.3 Color Code
  - Pair 1: White/Blue
    - Blue Pair 2: White/Orange Pair 3: White/Green Green
    - Pair 4: White/Brown Brown

#### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together to form the main core.

#### 2.4 Jacket

- 2.4.1 Material: FR-PVC
- 2.4.2 Wall Thickness: 0.050" nom.
- 2.4.3 OD: .238" nom
- 2.4.4 Color: Yellow with White Stripe
- 2.4.5 Ripcord under jacket

2.4.6 Markings: "PAIGE GAMECHANGER PATENT NO 10,453,589 ; 11,107,605 ; 11,562,835 ; & 11,646,133 (UL) CMR --- C(UL) E191596XX ROHS SUN RES" (Ascending/Descending length marking)

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance: ≤6.35Ω/100m
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Voltage Endurance: DC 1500V/min
- 2.5.4 Mutual Capacitance: ≤7.0nF/100m
- 2.5.5 Core-Core Resistance Unbalance: ≤5%
- 2.5.6 Maximum Voltage: 300V (Per NEC, not suitable for Class 1 power applications)
- 2.5.7 NVP: 67%
- 2.6 Temperature Rating
  - 2.6.1 -20°C to +75°C
- 2.7 Power over Ethernet Support
  - 2.7.1 Class 1 8

#### 3.0 Weights and Dimensions

- 3.1 Put Up
  - 3.1.1 Length: 1,000 ft box
  - 3.1.2 Weight: 29 lbs
  - 3.1.3 Dimensions: 15" x 12" x 15"

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<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any Cat6 connectivity will work. If you are using a RJ45

connector, check out this termination guide: https://paigedatacom.com/ uploads/Media/4/GameChanger%20 Termination%20Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

United States, Latin America, Middle East

#### We want to hear from you!

200 Sheffield St, Suite 302, Mountainside, NJ 07092

Tel: 888.423.8947 cgorders@paigeconnected.com www.paigeelectric.com/gamechanger



**Connecting You To More** 



Unshielded Twisted Pair Riser Rated - FT4

## 258440309

U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; colorcoded high density polyethylene (HDPE) insulation; overall FR-PVC jacket. RoHS-2 Compliant

#### 2.0 Construction

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

#### 2.2 Insulation

- 2.1.1 Material: Ultra Low-Loss Dielectric
- 2.1.2 O.D.: 0.044" nom
- 2.1.3 Color Code
  - Pair 1: White/Blue
    - Blue Pair 2: White/Orange Pair 3: White/Green Green
    - Pair 4: White/Brown Brown

#### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together to form the main core.

#### 2.4 Jacket

- 2.4.1 Material: FR-PVC
- 2.4.2 Wall Thickness: 0.050" nom.
- 2.4.3 OD: .238" nom
- 2.4.4 Color: Green
- 2.4.5 Ripcord under jacket

TINETING FORTENT

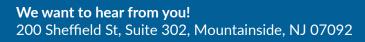
2.4.6 Markings: "PAIGE GAMECHANGER PATENT NO 10,453,589 ; 11,107,605 ; 11,562,835 ; & 11,646,133 (UL) CMR --- C(UL) CMG FT4E191596XX ROHS SUN RES" (Ascending/Descending length marking)

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance: ≤6.35Ω/100m
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Voltage Endurance: DC 1500V/min
- 2.5.4 Mutual Capacitance: ≤7.0nF/100m
- 2.5.5 Core-Core Resistance Unbalance: ≤5%
- 2.5.6 Maximum Voltage: 300V (Per NEC, not suitable for Class 1 power applications)
- 2.5.7 NVP: 67%
- 2.6 Temperature Rating
  - 2.6.1 -20°C to +75°C
- 2.7 Power over Ethernet Support
  - 2.7.1 Class 1 8

#### 3.0 Weights and Dimensions

- 3.1 Put Up
  - 3.1.1 Length: 1,000 ft box
  - 3.1.2 Weight: 29 lbs
  - 3.1.3 Dimensions: 15" x 12" x 15"







<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any Cat6 connectivity will work. If you are using a RJ45

connector, check out this termination guide: https://paigedatacom.com/ uploads/Media/4/GameChanger%20 Termination%20Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

Canada, United States, Latin America, Middle East

#### We want to hear from you!

200 Sheffield St, Suite 302, Mountainside, NJ 07092

Tel: 888.423.8947 cgorders@paigeconnected.com www.paigeelectric.com/gamechanger



**Connecting You To More** 



Unshielded Twisted Pair Plenum Rated - CMP

### 258300310

# U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; color-coded FEP insulation; overall LSFR-PVC jacket. RoHS-2 Compliant

#### 2.0 Construction

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

#### 2.2 Insulation

- 2.1.1 Material: Ultra Low-Loss Dielectric
- 2.1.2 O.D.: 0.044" nom
- 2.1.3 Color Code
  - Pair 1: White/Blue
  - Blue
    - Pair 2: White/Orange
      - Orange
    - Pair 3: White/Green
      - Green
    - Pair 4: White/Brown Brown

#### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together to form the main core.

#### 2.4 Jacket

- 2.4.1 Material: LSFR-PVC
- 2.4.2 OD: 0.248" nom
- 2.4.3 Color: White
- 2.4.4 Ripcord under jacket

2.4.5 Markings: "PAIGE GAMECHANGER PATENT NO 10,453,589 ; 11,107,605 ; 11,562,835 ; & 11,646,133 (UL) CMP--- C(UL) FT6 EXXXXX ROHS SUN RES" (Ascending/Descending length marking)

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance: ≤6.35Ω/100m
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Voltage Endurance: DC 1500V/min
- 2.5.4 Mutual Capacitance: ≤7.0nF/100m
- 2.5.5 Core-Core Resistance Unbalance: ≤5%
- 2.5.6 Maximum Voltage: 300V (Per NEC, not suitable for Class 1 power applications)
- 2.5.7 NVP: 63%

#### 2.6 Temperature Rating

2.6.1 -20°C to +75°C

- 2.7 Power over Ethernet Support
  - 2.7.1 Class 1 8

#### 3.0 Weights and Dimensions

#### 3.1 Put Up

- 3.1.1 Length: 1,000 ft box
- 3.1.2 Weight: 32 lbs
- 3.1.3 Dimensions: 15" x 12" x 15"





<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any Cat6 connectivity will work. If you are using a RJ45

connector, check out this termination guide: https://paigedatacom.com/ uploads/Media/4/GameChanger%20 Termination%20Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

United States, Latin America, Middle East

#### We want to hear from you!

200 Sheffield St, Suite 302, Mountainside, NJ 07092





Unshielded Twisted Pair Plenum Rated - CMP

### 258300336

U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; color-coded FEP insulation; overall LSFR-PVC jacket. RoHS-2 Compliant

#### 2.0 Construction

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

#### 2.2 Insulation

- 2.1.1 Material: Ultra Low-Loss Dielectric
- 2.1.2 O.D.: 0.044" nom
- 2.1.3 Color Code
  - Pair 1: White/Blue
  - Blue
    - Pair 2: White/Orange Orange
    - Pair 3: White/Green
    - Green
    - Pair 4: White/Brown
    - Brown

#### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together to form the main core.

#### 2.4 Jacket

- 2.4.1 Material: LSFR-PVC
- 2.4.2 OD: 0.248"nom
- 2.4.3 Color: Blue with a white stripe
- 2.4.4 Ripcord under jacket
- 2.4.5 Markings: "PAIGE GAMECHANGER

PATENT NO 10,453,589 ; 11,107,605 ; 11,562,835 ; & 11,646,133 (UL) CMP --- C(UL) FT6 EXXXXX ROHS SUN RES" (Ascending/Descendinglength marking)

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance: ≤6.35Ω/100m
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Voltage Endurance: DC 1500V/min
- 2.5.4 Mutual Capacitance: ≤7.0nF/100m
- 2.5.5 Core-Core Resistance Unbalance: ≤5%
- 2.5.6 Maximum Voltage: 300V (Per NEC, not
- suitable for Class 1 power applications) 2.5.7 NVP: 63%

#### 2.6 Temperature Rating

2.6.1 -20°C to +75°C

#### 2.7 Power over Ethernet Support

2.7.1 Class 1 - 8

#### 3.0 Weights and Dimensions

#### 3.1 Put Up

- 3.1.1 Length: 1,000 ft box
- 3.1.2 Weight: 32 lbs
- 3.1.3 Dimensions: 15" x 12" x 15"







<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any

Cat6 connectivity will work. If you are using a RJ45 connector, check out this termination guide: https:// paigedatacom.com/uploads/Media/4/ GameChanger%20Termination%20 Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

United States, Latin America, Middle East

#### We want to hear from you!

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Unshielded Twisted Pair FEP/FEP Indoor / Outdoor Plenum Rated

### 258950306

# U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; color-coded FEP insulation; marking tape and overall FEP jacket. RoHS-2 Compliant

#### 2.0 Construction

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

#### 2.2 Insulation

- 2.1.1 Material: FEP
- 2.1.2 O.D.: 0.044" nom
- 2.1.3 Color Code
  - Pair 1: White/Blue
  - Blue
    - Pair 2: White/Orange Orange
    - Pair 3: White/Green
    - Green
    - Pair 4: White/Brown Brown

#### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together to form the main core; a marking tape is included along the core

#### 2.4 Jacket

- 2.4.1 Material: FEP
- 2.4.2 OD: 0.208"nom
- 2.4.3 Color: Blue
- 2.4.4 Marking tape under jacket

2.4.5 Markings: "PAIGE(R) GAMECHANGER (R) US PATENT NO.S 10,453,589 11,107,605 22AWG 4PR CMP 200C ROHS-2 CERTIFIED TO TIA-568.2-D CAT 6 YYMMDD hh:mm XXXXFT/XXXXFT" (Ascending/Descendinglength marking)

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance: ≤9.38Ω/100m
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Mutual Capacitance: ≤5.6nF/100m
- 2.5.4 Maximum Voltage: 300V (Per NEC, not
- suitable for Class 1 power applications)
- 2.5.5 NVP: 63%

#### 2.6 Temperature Rating

- 2.6.1 Installing: -40°C to +200°C
- 2.6.2 Operating: -40°C to +200°C
- 2.7 Power over Ethernet Support
  - 2.7.1 Class 1 8

#### 3.0 Weights and Dimensions

#### 3.1 Put Up

- 3.1.1 Length: 1,000 ft box
- 3.1.2 Weight: 32 lbs
- 3.1.3 Dimensions: 13" x 10" x 9"







<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any

Cat6 connectivity will work. If you are using a RJ45 connector, check out this termination guide: https:// paigedatacom.com/uploads/Media/4/ GameChanger%20Termination%20 Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

United States, Latin America, Middle East

#### We want to hear from you!

200 Sheffield St, Suite 302, Mountainside, NJ 07092





**Unshielded Twisted Pair** C<sub>2</sub>-s1a, d0, a1

258502306 500m drum 258500306 305m box

### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; color-coded FEP insulation; overall LSZH-FRPE jacket. EN50575:2014 C\_-s1a, d0, a1 and CE/ **RoHS-2** Compliant

### 2.0 Construction

- Conductor 2.1
  - 2.1.1 Material: Bare Copper
  - 2.1.2 Construction: Solid 22AWG
  - 2.1.3 O.D.: 0.610 mm min.
- 2.2 Insulation
  - 2.1.1 Material: Ultra Low-Loss Dielectric
  - 2.1.2 O.D.: 1.1176 mm nom.
  - 2.1.3 Color Code Pair 1: White/Blue + Blue Pair 2: White/Orange + Orange Pair 3: White/Green + Green Pair 4: White/Brown + Brown
- 2.3 Core Assembly:
  - 2.3.1 4 twisted pairs stranded together to form the main core.
- 2.4 Jacket
  - 2.4.1 Material: LSZH-FRPE with UV Resistance

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Tel: 888.423.8947 gamechanger@paigeelectric.com www.paigedatacom.com/gamechanger



2.5.5 Core-Core Resistance Unbalance: ≤5%

2.4.2 OD: 6.2992 mm nom.

Ripcord under jacket

Markings: "PAIGE(R)

2.4.3 Color: Bl

2.4.4 2.4.5

2.5

2.5.1

- 2.6 **Temperature Rating** 
  - -20°C to +75°C (installation) 2.6.1
  - 2.6.2  $-40^{\circ}$ C to  $+75^{\circ}$ C (operating)
- 2.7 Power over Ethernet Support
  - 2.7.1 Class 1 8



Frequency MHz	Return Loss ≥dB/100m	Attenuation ≤dB/100m	NEXT ≥dB/100m	PSNEXT ≥dB/100m
1	32.7	1.5	82.0	78.5
4	34.4	3.0	71.3	66.8
10	30.5	4.8	63.6	60.3
16	33.5	6.2	56.7	56.2
20	35.0	6.2	56.7	56.2
25	34.1	7.8	59.3	55.3
31.25	31.5	8.8	60.9	56.9
62.50	31.1	8.8	60.9	56.9
100	29.4	16.3	50.2	49.2

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

Maximum transmission distance exceeds Category Rating limits, but varies with equipment and settings used. If you have any questions about the maximum recommended distance for a particular installation, please contact us.

#### Connectors

GameChanger cabling works with most Category 6 non shielded connectors. Make sure your connector supports 22AWG conductors.

### Alternate Constructions

GameChanger cabling is also available with:

- 258330804 OSP, Black
- 258340804 OSP Shielded, Black

#### Frequently Asked Questions

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

United Kingdom, Europe, Middle East

### We want to hear from you!

Tel: 888.423.8947 gamechanger@paigeelectric.com www.paigedatacom.com/gamechanger





## GameChanger LSZH OSP Cable

Unshielded Twisted Pair LSZH OSP Direct Burial

### 258330804

# U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; color-coded high density polyethylene (HDPE) insulation; water-proof gel; overall LSZH / OSP Direct Burial jacket. RoHS-2 Compliant

#### 2.0 Construction

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

#### 2.2 Insulation

- 2.1.1 Material: Ultra Low-Loss Dielectric
- 2.1.3 O.D.: 0.044" nom
- 2.1.4 Color Code
  - Pair 1: White/Blue Blue Pair 2: White/Orange
  - Orange Pair 3: White/Green
  - Green Pair 4: White/Brown
  - Brown

### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together and fully flooded with a waterproof gel to form the main core.

#### 2.4 Jacket

- 2.4.1 Material: PE
- 2.4.2 Wall Thickness: 0.050" nom.
- 2.4.3 OD: 0.305" nom.
- 2.4.4 Color: Black
- 2.4.5 Ripcord under jacket

2.4.6 Markings: "PAIGE® GAMECHANGER™ PATENT NO 10,453,589 ; 11,107,605 ; 11,562,835 ; & 11,646,133 OSP C(UL) CM-LS E191596XX ROHS SUN RES" (Ascending/Descending length marking)

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance:  $\leq 6.35\Omega/100m$
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Voltage Endurance: DC 1500V/min
- 2.5.4 Mutual Capacitance: ≤7.0nF/100m
- 2.5.5 Core-Core Resistance Unbalance: ≤5%
- 2.5.6 Maximum Voltage: 300V (Per NEC, not suitable for Class 1 power applications)2.5.7 NVP: 60%
- 2.6 Temperature Rating
  - **Temperature Rating** 2.6.1 -20°C to +75°C (installation)
  - 2.6.2 -40°C to +75°C (operating)
- 2.7 Power over Ethernet Support

2.7.1 Class 1 - 8

#### 3.0 Weights and Dimensions

#### 3.1 Put Up

- 3.1.1 Length: 1,000 ft box
- 3.1.2 Weight: 52 lbs
- 3.1.3 Dimensions: 16" x 12" x 16"



### We want to hear from you!



<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any Cat6 connectivity will work. If you are using a RJ45

connector, check out this termination guide: https://paigedatacom.com/ uploads/Media/4/GameChanger%20 Termination%20Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

North America, Latin America, Europe, Middle East

#### We want to hear from you!

200 Sheffield St, Suite 302, Mountainside, NJ 07092



# GameChanger Shielded OSP Cable

Shielded Twisted Pair CM, 600V AWM

### 258340804

U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

### 1.0 Scope

ΠΑΤΑΓΩΜ SOLUTIO

1.1 This cable consists of 4 pair solid bare copper; color-coded high density polyethylene (HDPE) insulation; water-proof gel; inner and outer LSZH FR Polyolefin jacket with a aluminum/polyester tape shield with 24 AWG tinned copper drain wire in between the two jackets . Compliant with c(UL), CM Compliant, UL Subject 444 Communication Cables, AWM Style 22427 80C 600V, UL Subject 758 Appliance Wiring Material, Sunlight Resistant, California State Fire Marshal Approved, RoHS **2.0 Construction** 

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

### 2.2 Insulation

- 2.1.1 Material: Ultra Low-Loss Dielectric
  - 2.1.3 O.D.: 0.044" nom
    - 2.1.4 Color Code
      - Pair 1: White/Blue
      - Blue Pair 2: White/Orange
        - Orange
      - Pair 3: White/Green
        - Green
      - Pair 4: White/Brown Brown

#### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together and fully f looded with a waterproof gel to form the main core which is then jacketed with a FRPO inner jacket.

### 2.4 Jackets

- 2.4.1 Material: FRPE
- 2.4.2 Inner Wall Thickness: 0.025" nom.
- 2.4.3 Outer Wall Thickness: 0.025" nom

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- 2.4.3 Total OD: 0.380" nom.
- 2.4.4 Color: Black
- 2.4.5 Ripcord under jacket
- 2.4.6 Markings: "PAIGE(R) GAMECHANGER(TM) 258340804 PATENT NO 10,453,589 ; 11,107,605 ; 11,562,835 ; & 11,646,133 SHIELDED OSP c(UL)us 22/4P CM-ST1 E191569++ or AWM 22427 80C 600V---RoHS SUN RES --- DIRECT BURIAL ---CERTIFIED TO TIA/EIA CAT 6 (01-12345) Ascending/Descending length marking)

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance: ≤6.35Ω/100m
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Voltage Endurance: DC 1500V/min
- 2.5.4 Mutual Capacitance: ≤7.0nF/100m
- 2.5.5 Core-Core Resistance Unbalance: ≤5%
- 2.5.6 Maximum Voltage: 600V
- 2.5.7 NVP: 60%

#### 2.6 Temperature Rating

- 2.6.1 -20°C to +80°C (installation)
- 2.6.2 -44°C to +80°C (operating)

### 2.7 Power over Ethernet Support

2.7.1 Class 1 - 8

#### 3.0 Weights and Dimensions

#### 3.1 Put Up

- 3.1.1 Length: 1,000 feet reel
- 3.1.2 Weight: 63 lbs
- 3.1.3 Dimensions: 16" x 12" x 16"





<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any Cat6 connectivity will work. If you are using a RJ45

connector, check out this termination guide: https://paigedatacom.com/ uploads/Media/4/GameChanger%20 Termination%20Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

North America, Latin America, Europe, Middle East

#### We want to hear from you!

200 Sheffield St, Suite 302, Mountainside, NJ 07092





# GameChanger Shielded OSP AIA Cable

Shielded Twisted Pair CM, 600V AWM Aluminum Interlocked Armor

## 258880845

U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

1.1 This cable consists of 4 pair solid bare copper; color-coded high density polyethylene (HDPE) insulation; water-proof gel; inner and outer LSZH FR Polyolefin jacket with an aluminum/polyester tape shield with 24 AWG tinned copper drain wire in between the two jackets . An Aluminum Interlocked Armor surrounds the entire cable. Compliant with c(UL), CM Compliant, UL Subject 444 Communication Cables, AWM Style 22427 80C 600V, UL Subject 758 Appliance Wiring Material, Sunlight Resistant, California State Fire Marshal Approved, RoHS

#### 2.0 Construction

#### 2.1 Conductor

- 2.1.1 Material: Bare Copper
- 2.1.2 Construction: Solid 22 AWG

#### 2.2 Insulation

- 2.1.1 Material: Ultra Low-Loss Dielectric
  - 2.1.3 O.D.: 0.044" nom
    - 2.1.4 Color Code
      - Pair 1: White/Blue + Blue
      - Pair 2: White/Orange + Orange
      - Pair 3: White/Green + Green
      - Pair 4: White/Brown + Brown

#### 2.3 Core Assembly:

2.3.1 4 twisted pairs cabled together and fully flooded with a waterproof gel to form the main core which is then jacketed with a FRPO inner jacket.

#### 2.4 Jackets

- 2.4.1 Material: FRPE
- 2.4.2 Inner Wall Thickness: 0.025" nom.
- 2.4.3 Outer Wall Thickness: 0.025" nom
- 2.4.3 Total OD: 0.380" nom.
- 2.4.4 Color: Black

#### We want to hear from you!

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- 2.4.5 Ripcord under jacket
- 2.4.6 Markings: "PAIGE(R) GAMECHANGER(TM) 258340804 PATENT NO 10,453,589 ; 11,107,605 ; 11,562,835 ; & 11,646,133 SHIELDED OSP c(UL)us 22/4P CM-ST1 E191569++ or AWM 22427 80C 600V---RoHS SUN RES --- DIRECT BURIAL ---CERTIFIED TO TIA/EIA CAT 6 (01-12345) Ascending/Descending length marking)

#### 2.5 Armor

2.5.1 Material: Aluminum Interlocked Armor

#### 2.5 Electrical Properties

- 2.5.1 Conductor Resistance: ≤6.35Ω/100m
- 2.5.2 Insulation Resistance: ≥5000MΩKm (DC500V Charged 1 Min)
- 2.5.3 Voltage Endurance: DC 1500V/min
- 2.5.4 Mutual Capacitance: ≤7.0nF/100m
- 2.5.5 Core-Core Resistance Unbalance: ≤5%
- 2.5.6 Maximum Voltage: 600V
- 2.5.7 NVP: 60%

#### 2.6 Temperature Rating

- 2.6.1 -20°C to +80°C (installation)
- 2.6.2 -44°C to +80°C (operating)

#### 2.7 Power over Ethernet Support

2.7.1 Class 1 - 8

#### 3.0 Weights and Dimensions

#### 3.1 Put Up

- 3.1.1 Length: 1,000 feet reel
- 3.1.2 Weight: 162 lbs
- 3.1.3 Dimensions: 36" x 36" x 16"



<b>Frequency</b> MHz	<b>Return Loss</b> ≥dB/100m	<b>Insertion Loss</b> ≤dB/100m	<b>NEXT</b> ≥dB/100m	<b>PSNEXT</b> ≥dB/100m
1	24	1.5	90	87
10	31	4.8	75	72
20	32	7.0	64	61
100	26	16.1	50	47
200	24	23.2	48	45
250	21	26.1	47	44
350	20	31.4	45	42
500	19	38.3	43	40
550	18	40.4	42	39

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any Cat6 connectivity will work. If you are using a RJ45

connector, check out this termination guide: https://paigedatacom.com/ uploads/Media/4/GameChanger%20 Termination%20Guide.pdf



#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP, Black
- 258340804 OSP Shielded, Black
- 258802404 Class I, Division 1 Armored

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

North America, Latin America, Europe, Middle East

#### We want to hear from you!

200 Sheffield St, Suite 302, Mountainside, NJ 07092





# GameChanger **Hazardous Location Cable**

ITC-HL Class I Division 1 Armored

258802404

#### U.S. Patent No.'s 10,453,589; 11,107,605; 11,562,835; and 11,646,133

#### 1.0 Scope

This cable consists of 4 pair solid bare copper; 1.1 color-coded Fluorinated Ethylene Propylene (FEP) insulation; inner FEP and PVC jacket, Coninuously Corrugated Welded (CCW) Armor and outer PVC jacket. RoHS-2 Compliant, Sunlight Resistant, Direct Burial. Suitable for Class | Div 1. Class || Div 1 installations

UL2250 Listed Type ITC 300V UL2225 Listed Type ITC-HL 300V for use in Class 1 Div 1 Hazardous locations.

### 2.0 Construction

#### 2.1 Conductor

2.1.1 Material: Bare Copper 2.1.2 Construction: Solid 22 AWG

### 2.2 Insulation

- 2.2.1 Material: FFP
- 2.2.3 O.D.: 0.0425" nom
- 2.2.4 Color Code
  - Pair 1: White/Blue
    - Blue
    - Pair 2: White/Orange Orange Pair 3: White/Green

      - Green
    - Pair 4: White/Brown Brown

#### 2.3 **Core Assembly:**

2.3.1 4 twisted pairs cabled together to form the main core which is then jacketed with FEP and PVC inner jackets.

#### 2.4 **Jackets**

- 2.4.1 Material: FEP/PVC/PVC
- 2.4.2 Natural FEP. 0.218" nom. diameter
- 2.4.3 Black, PVC, 0.568" nom. diameter
- 2.4.4 Outer OD: 0.95" nom.
- 2.4.5 Color: Black
- 2.4.6 Continuously Corrugated Welded Aluminum Armor between jackets.
- 2.4.7 Markings: PAIGE GAMECHANGER CABLE<sup>™</sup> PATENT NO 10,453,589 ; 11,107,605; 11,562,835; & 1,646,133AWG 4 Pair (UL) Type ITC-HL Sun Res ROHS (Ascending/Descending length marking)

#### 2.5 **Electrical Properties**

- 2.5.1 Conductor Resistance:  $\leq 9.38\Omega/100m$
- 2.5.2 Max DC Resistance Unbalance: ≤5%
- 2.5.3 Nom. Velocity of Propagation 67%

#### 2.6 **Physical Properties**

2.6.1 Nominal Cable Weight: .331Lbs / ft 2.6.2 Bend Radius: Min: 14"

#### 2.7 **Temperature Rating**

- 2.7.1 -20°C to +60°C (installation)
- 2.7.2 -50°C to +90°C (operating)

### 3.0 Weights and Dimensions

3.1 Package: Ordered by the foot, shipped on a reel .34 lbs/ ft (without reel) 3.2 Weight:







Frequency MHz	Return Loss ≥dB/100m	Attenuation ≤dB/100m	NEXT ≥dB/100m	PSNEXT ≥dB/100m
1	28	1.5	77	75
4	31	3.0	68	66
10	33	4.8	62	60
16	33	6.2	59	57
20	33	6.2	58	56
25	32	7.8	56	54
31.25	31	8.8	55	53
62.50	29	8.8	50	48
100	28	16.3	47	45

#### Application

GameChanger cabling is designed specifically for transmitting Ethernet and can support all 8 classes of Power over Ethernet.

GameChanger Cable can deliver 2.5Gbps and 100W PoE up to 656 feet (200m) or if you need to go farther, GameChanger Cable can deliver 10Mbps and 100W PoE up to 850 feet (259m).

#### Connectors

GameChanger cables have 22 AWG conductors. So when punching down to a jack or a patch panel, any

Cat6 connectivity will work. If you are using a RJ45 connector, check out this termination guide: https:// paigedatacom.com/uploads/Media/4/ GameChanger%20Termination%20 Guide.pdf



#### **HL-Glands**

ITC-HL GameChanger Cable works well with Crouse-Hinds Terminator™ TMCX Cable Glands

#### **Alternate Constructions**

GameChanger cabling is also available with:

- 258310333 Riser, Yellow w/ White Stripe
- 258300336 Plenum, Blue w/ White Stripe
- 258300310 Plenum, White
- 258330804 OSP (non shielded), Black
- 258340804 OSP (Shielded), Black

#### **Frequently Asked Questions**

For FAQ and best practices please visit: www.paigedatacom.com/gamechanger

#### **Regional Availability**

United States, Latin America, Middle East

We want to hear from you! 200 Sheffield St, Mountainside, NJ 07092

