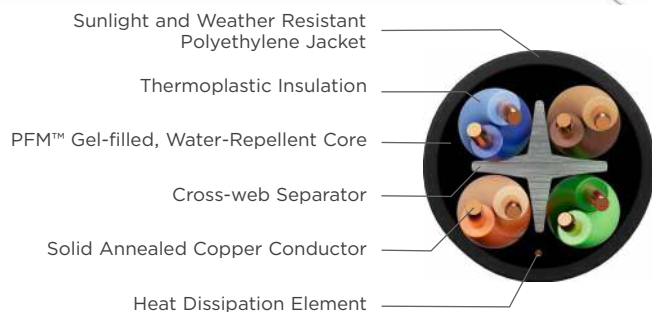


# PowerWise® 1G 4PPoE

OSP Unshielded



## SPECIFICATIONS

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	22 (0.64)
Insulation	Polyolefin
Insulation Colors	Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
Heat Dissipation Element	Coated copper
Separator	Polyolefin cross-web
Jacket	Black, sunlight and weather resistant polyethylene
Characteristic Impedance Ohms	100 ± 15
Nominal Velocity of Propagation, %	66
Performance Compliance	ANSI/TIA-568.2-D ANSI/ICEA S-107-704-2012 RoHS-compliant/RoHS 2-compliant REACH-compliant
Sustainability	UL Certified EPD RoHS-compliant/RoHS 2-compliant

## ENVIRONMENTAL SPECIFICATIONS AND TESTS

Operation	-40°F to +167°F (-40°C to +75°C)
Installation	-40°F to +140°F (-40°C to +60°C)
ANSI/ICEA S-100-685-2009 Tested down to -67°F (-55°C)	Section 7.1: -4°F (-20°C) cold bend test Section 7.2: +14°F (-10°C) cold impact test Section 7.3: -40°F (-40°C) anvil test



### TECHNICAL GUIDELINE

Special connectivity is required for these cable designs. Refer to the "Resources" section on our site for the Technical Guideline, "OSP Broadband Installation Guidelines," for more information.



### CAUTIONARY INFORMATION

- For distance and warranty information please refer to TG115 PowerWise® Extended Distance Frequently Asked Questions.

## PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Product Type	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package
PW04-401-58	UTP	0.31 (7.9)	41 (61)	1,000' reel

Additional part numbers, constructions and packaging available upon request.

## PRODUCT DESCRIPTION

PowerWise® 1G 4PPoE cables provide the best performance and overall value for 4 Pair Power over Ethernet (4PPoE) applications requiring up to 100W of power and up to 2.5GBASE-T Ethernet performance. PowerWise® 1G 4PPoE cables are specifically designed to mitigate temperature build-up offer exceptional energy efficiency and ensure performance (up to 2.5GBASE-T Ethernet) over the lifetime of your system. Cable temperature increases are reduced and power efficiency is increased as a result of 22 gauge conductors and the heat dissipation element.

PowerWise® 1G 4PPoE cables are the best solution to connect and power your 4PPoE and extended distance applications compared to standard category cable designs.

PowerWise® 1G 4PPoE OSP Unshielded is a robust category cable designed to provide an extension of the LAN beyond the premises or in situations where the NEC code requires an OSP-rated cable. The cable consists of a core of four (4) balanced twisted pairs surrounded by Superior Essex PFM™ gel that does not drip or flow, even in cell tower applications at elevated temperatures. The core is jacketed with a sunlight and abrasion resistant black, polyethylene outer jacket. This unshielded design is suitable for the following deployments: duct, underground conduit and tower.

## APPLICATIONS

- 10BASE-T through 2.5GBASE-T Ethernet
- Power over Ethernet (PoE) - IEEE 802.3bt Type 1 to 4
- ATM and token ring
- HDBaseT Class A and B

## FEATURES

- Tested 350 MHz
- Unshielded
- PFM gel-filled core construction
- OSP-grade black polyethylene jacket
- ColorTip® circuit identification system
- Tested in most severe temperature conditions in bundle of 100 cables
- Heat dissipation element
- Ideal for extended distance over 100m

## BENEFITS

- Assures ample overhead for reliable transmission in an OSP-rated cable allowing extension of the premises LAN
- Small, robust design
- Prevents intrusion of and easily wipes clean during installation
- Outside plant rated cable for years of reliable performance
- Easily identifiable conductor mates even in low-light environments
- AWG 22 insulated wire offers 88% power efficiency and lowest temperature increase inside a bundle, the best of its class
- Mitigate the heat to same level along the whole distance of the link for improved bandwidth performances
- Guaranteed distance for different applications based on BER test performed by UL at UL facility