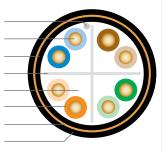
# PowerWise® 1G 4PPoE

**OSP** Armored



Polyethylene Inner Jacket Cross-web Separator PFM™ Gel-filled, Water-Repellent Core Thermoplastic Insulation Copper-clad Steel Armor Sunlight and Weather Resistant

Polyethylene Outer Jacket



SPECIFICATIONS	
Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	22 (0.64)
Insulation	Polyolefin
Separator	Polyolefin cross-web
Inner Armor	Electrically continuous 0.005 in (0.13 mm) corrugated copper-clad steel armor, applied with an overlap
Dry Water Block	SAP yarn
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

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. Bonding and grounding is important to prevent EMI. 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 warranty and tech guide documents

#### 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 1 Gigabit Ethernet performance. PowerWise 1G 4PPoE cables are specifically designed to mitigate temperature build-up offer exceptional energy efficiency and ensure performance (up to 1 Gigabit 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 Armored 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 when it is in contact with earth, whether in a conduit or not. The cable consists 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 jacketed core is covered with dry block and a corrugated, copperclad steel armor providing exceptional Alien Crosstalk (AXT) performance. The outer jacket is an OSP-grade black polyethylene for superior sunlight and abrasion resistance. This armored design is suitable for the following deployments: duct, underground conduit, tower, lashed aerial, direct burial or open trench.

#### **APPLICATIONS**

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3bt Type 1 to 4
- ATM and token ring
- HDBaseT Class A and B

FEATURES	BENEFITS

- Tested 350 MHz
- · Assures ample overhead for reliable transmission in an OSP-rated cable allowing extension of the premises LAN
- Corrugated, copper-clad steel armor
- Rugged shield provides protection against EMI/RFI and provides rodent resistance
- Dry block between armor and inner jacket
- Prevents water ingress between armor and inner cable preventing damage to equipment

• PFM gel-filled core construction

- Prevents intrusion of moisture and easily wipes clean during installation
- OSP-grade black polyethylene jacket
- Outside plant rated cable for
- ColorTip® circuit identification system
- years of reliable performance Easily identifiable conductor mates even in low-light
- Tested in most severe temperature conditions in
- environments AWG 22 insulated wire offers 88% power efficiency and lowest temperature increase
- bundle of 100 cables
- Mitigate the heat to same level along the whole distance of the link for improved bandwidth

inside a bundle, the best of its

- · Heat dissipation element
- performances Guaranteed distance for different applications based on BER test performed by UL at UL

facility

Ideal for extended distance over

PART NUMBERS AND PHYSICAL CHARACTERISTICS Nominal Diameter Approx. Weight Part Number **Product Type** in (mm) lbs/kft (kg/km) Package 78 (115) PW04-401-55 UTP 0.4 (10.2) 1,000' reel

Additional part numbers, constructions and packaging available upon request.

