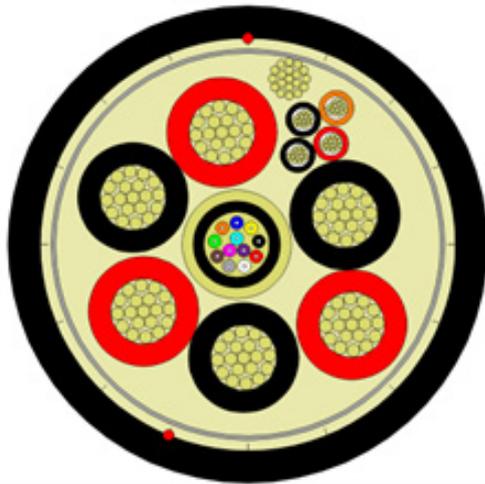This hybrid cable is ideal for wireless infrastructure applications such as macro cell towers. It is designed for outdoor installations, including direct burial, and combines power, alarm signaling, and optical fiber transmission in a single, rugged cable. Built to perform in harsh conditions, it withstands exposure to UV, moisture, and extreme temperatures, making it a reliable all-in-one solution for complex connectivity needs in challenging environments.

Applications

- Wireless infrastructure macro cell towers
- Outdoor installations, including direct burial
- Industrial or telecom environments requiring:
  - Power
  - Signal (alarm)
  - Optical fiber transmission in one cable
- Environments exposed to UV, moisture, and harsh temperatures

Features

- Fiber Type: 12F Single Unit 5mm-10mm OD, SM G657/A series 250µm LT
- Max Attenuation:
  - 0.50 dB/km at 1310 nm
  - 0.50 dB/km at1550 nm
- Voltage Rating: 600V (Power & Alarm Conductors)
- Temperature Rating:
  - Operating: -40°C to 90°C
  - Conductor: 90°C Dry & Wet
- Flame Performance: TC-OF / TFFN / THWN-2 / FT4
- Dielectric Withstand: 2,000V RMS for 60 seconds
- Minimum Bend Radius: 10 × Outer Diameter (~31.39–32 mm)
- Markings: Inkjet print, footage markers
- Weight: 1,350.9 lbs./kft

Standards & Certifications

- ANSI/ICEA S-87-640-2023
- UL® Listed 1277
- UL® Listed 83
- ITU-T G.657.A series & G.652.D
- GR-20
- Made in USA / Build America Buy America (BABA)
- TL9000

Construction

- Power Conductors: 6x4 AWG (19-strand) Bare Copper
  - DC Resistance: 0.259 ohm/1,000 ft max at 20°C
  - Color Code: (3) Black, (3) Red
- Alarm Pairs: 2 Pairs 18 AWG (16-strand) Bare Copper
  - Insulation: Polyvinylchloride/Nylon
  - DC Resistance: 6.66 ohm/1,000 ft max at 20°C
  - Color Code: Black/White-Black, Orange/Orange-Black
- Fiber Unit: 12 Fiber Single Unit, SM G657/A series, 250µm, LT
- Fiber Fillers: Non-Hygroscopic Polypropylene for Circular Cross-Section
- Insulation: Polyvinylchloride/Nylon
- Conductor Markings: 1-ONE, 2-TWO, 3-THREE (every 3 inches)
- Shield: 3-mil Bare Copper Foil Tape with Minimum 20% overlap
- Outer Jacket:
  - Black Polyvinylchloride (PVC)
  - UV/Sunlight Resistant
  - Direct Burial Rated
  - Diameter: 31.39 mm – 32 mm ± 0.63 mm
- Ground / Drain Wire: 6 AWG, 19-strand bare copper, 100% constant contact with shield
- Ripcord: Aramid (1), 2-ply