PROTERIAL

Power+ Class 4 Digital Electricity, FMPS

UL 1400-2, 450V, Indoor Plenum, Hybrid Power+ Cable

PROTERIAL

PRODUCT HIGHLIGHTS

- RoHS 3 compliant
- FMPS (fault managed power system) compliant
- Made in U.S.A.
- Combines data and power in a single cable for efficient installations
- 450V Class 4 rating offers a safer alternative to traditional 300V or 600V solutions.
- Enables longer cable runs with smaller AWG power wires, ideal for edge devices.
- Aligns with upcoming 2026 NEC (National Electric Code) revisions for Limited Energy solutions.



• UV Resistant (Yellow & Black)

- 2 12 Fiber Configurations, Single Mode*
- 1 8 pair DC Power (16-12 AWG)

BENEFITS

- Approved Class 4 with all required UL markings including unique identification as evidence of full compliance.
- FMPS enhance safety by automatically shutting down in the event of a fault, protecting both personnel and equipment.
- Supports future-ready Limited Energy applications under NEC (2026) Article 726
- Enables longer cable runs and higher voltage delivery compared to traditional PoE or SELV systems.
- Conduit not required leading to lower infrastructure costs.
- Compatible with all FMPS Equipment as well as being backwards compatiable for Class 2 and Class 3 applications.
- Hybrid Fiber & Power Wires are ideal for long-distance applications requiring high-speed data performance combined with safe, efficient power distribution.

STANDARDS

- UL 1400-2 Outline of Investigation For Fault Managed Power Systems
- ICEA S-120-742 Hybrid Optical & Power Cable for use in Limited Power Circuits
- Additional Standard: ICEA S-83-596 Indoor Optical Cable

TEMPERATURE RANGE

- Storage Temperature -20°C to +75°C (-4°F to +167°F)
- Installation Temperature 0°C to +60°C (+32°F to +140°F)
- **Operation Temperature** -20°C to +75°C (-4°F to +167°F)

CL4P-OF - 16 AWG with OS2 900um Tight-Buffer

| Part Number | # of Pairs | # of Fibers | Calculated Cable O.D. | Weight LBS per K | Jacket | Bend Radius |
|-------------|---------------|----------------|--------------------------|---------------------|----------|-------------|
| | | | inches/mm | lbs/1000ft | | |
| 42564-4 | 1 | 2 | 0.284 / 7.21 | 49.6 | | 2.84" (10x) |
| 42577-8 | 2 | 4 | 0.389 / 9.88 | 85.6 | LSPVC | 4.67" (12x) |
| 42563-12 | 3 | 6 | 0.407/ 10.33 | 103.2 | (Yellow) | 6.11" (15x) |
| 42587-28 | 8 | 12 | 0.610 / 15.50 | 236.2 | | 9.15" (15x) |

CL4P-OF - 14 AWG with OS2 900um Tight-Buffer

| Part Number | # of Pairs | # of Fibers | Calculated Cable O.D. | Weight LBS per K | Jacket | Bend Radius |
|-------------|---------------|----------------|--------------------------|---------------------|-------------------|-------------|
| | | | inches/mm | lbs/1000ft | | |
| 42576-4 | 1 | 2 | 0.305 / 7.75 | 63.3 | | 3.05" (10x) |
| 42581-8 | 2 | 4 | 0.443 / 11.25 | 115.2 | LSPVC (Yellow) | 5.32" (12x) |
| 42583-12 | 3 | 6 | 0.471 / 11.96 | 148.6 | | 7.07" (15x) |

CL4P-OF - 12 AWG with OS2 900um Tight-Buffer

| Part Number | # of Pairs | # of Fibers | Calculated Cable O.D. | Weight LBS per K | Jacket | Bend Radius |
|-------------|---------------|----------------|--------------------------|---------------------|-------------------|-------------|
| | | | inches/mm | lbs/1000ft | | |
| 42575-4 | 1 | 2 | 0.328 / 8.33 | 80.8 | | 3.28" (10x) |
| 42580-8 | 2 | 4 | 0.506 / 12.85 | 155.5 | LSPVC (Yellow) | 6.07" (12x) |
| 42582-12 | 3 | 6 | 0.530 / 13.46 | 204.4 | (******) | 7.95" (15x) |

Standard Jacket Color TIA 598-D

plus

Contact Proterial for non-stock jacket colors

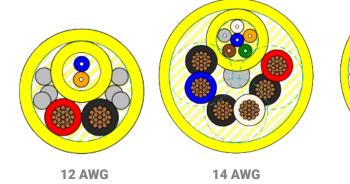


| CL4P-OF - 16 AWG with OS2 900um Tight-Buffer | | | | | | | | | |
|--|------------------------------------|-------------------|-----------------|-------------|-----------------------|-------------------|--|--|--|
| Part Number | Fiber Type | Fiber Comp. OD | Pulling Tension | Compression | Mutual Capacitance | Voltage Rating | | | |
| | | inches/mm | | | | | | | |
| 42564-4 | | 0.140 / 3.56 | Install: | | | | | | |
| 42577-8 | SM G657 A2 900um Single-Unit | 0.150 / 3.81 | 660 N / 150 lbf | 100 N/cm | < 40 pF / ft. | 450 Vrms | | | |
| 42563-12 | | 0.164 / 4.17 | Operation: | | | | | | |
| 42587-28 | | 0.234 / 5.94 | 200 N / 45 lbf | | | | | | |

| CL4P-OF - 14 AWG with OS2 900um Tight-Buffer | | | | | | | |
|--|------------------------------------|-------------------|------------------------------|-------------|-----------------------|-------------------|--|
| Part Number | Fiber Type | Fiber Comp. OD | Pulling Tension | Compression | Mutual Capacitance | Voltage Rating | |
| | | inches/mm | | | | | |
| 42576-4 | | 0.140 / 3.56 | Install: | | | | |
| 42581-8 | SM G657 A2 900um Single-Unit | 0.150 / 3.81 | 660 N / 150 lbf | 100 N/cm | < 40 pF / ft. | 450 Vrms | |
| 42583-12 | | 0.164 / 4.17 | Operation: 200 N / 45 lbf | | | | |

CL4P-OF - 12 AWG with OS2 900um Tight-Buffer

| 42580-8 SM G657 A2 900um 0.150 / 3.81 660 N / 150 lbf 100 N/cm < 40 pF / ft. | Part Number | Fiber Type | Fiber Comp. OD | Pulling Tension | Compression | Mutual Capacitance | Voltage Rating | |
|---|----------------|-------------|-------------------|-----------------|-------------|-----------------------|-------------------|------------------|
| 42580-8 42582-12 SM G657 A 2 900um Single-Unit 0.150 / 3.81 0.164 / 4.17 660 N / 150 lbf Operation: 200 N / 45 lbf 100 N/cm < 40 pF / ft. | | | inches/mm | | | | | (\mathbf{C}) |
| 42580-8 A2 900um 0.15073.81 0peration: 200 N / 45 lbf 100 N/cm < 40 pF / ft. | 42575-4 | | 0.140 / 3.56 | | | | | |
| Image: Weight of the second | 42580-8 | | 0.150 / 3.81 | 660 N / 150 lbf | 100 N/cm | < 40 pF / ft. | 450 Vrms | |
| | 42582-12 | Single-Unit | 0.164 / 4.17 | | | | | |
| | | | 1 | 4 AWG | 16 | | | |



*Other fiber types available, contact

Proterial Cable America, Inc. is continuously improving the performance of our products and the accuracy of the information provided. Due to this, we reserve the right to modify, revise, correct, or change products without notice. Thank you for your understanding.



CORNING

Optical Fiber

Power+ Class 4 Digital Electricity, FMPS

UL 1400-2, 450V, Indoor Plenum, Hybrid Power+ Cable

