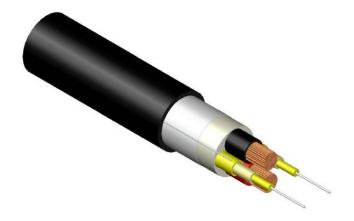


# NFC13BU02 Hybrid Optical/Power Cable

Hybrid Optical/Power Cable 2 conductor + 2/4 fibers





Novobit's Hybrid Optical/Power Cable with a CPR class of performance B2ca-s1,d0,a3 is designed for a variety of applications where both electrical power and optical fiber are required. It consists of one optical cable with 2 or 4 fibers and two copper conductors of either 1.5mm<sup>2</sup> or 2.5mm<sup>2</sup> each. The optical cable and copper conductors are unified by glass yarns for rodent protection and with an outer jacket of LSZH with UV stabilization enabling both indoor and outdoor installations. The outer jacket can be delivered in any colour requested matching the environment.

# **Optical Properties**

The cable is available with the following fiber types:

| Single mode |         | Mul | Multimode |  |  |
|-------------|---------|-----|-----------|--|--|
| -           | G652    | -   | OM2       |  |  |
| -           | G657.A1 | -   | ОМЗ       |  |  |
| -           | G657.A2 | -   | OM4       |  |  |

#### **Temperature Properties**

Service -10°C to +50°C

| Specifications and Pe | erformance |
|-----------------------|------------|
|-----------------------|------------|

| Conductor area [mm²]                  | 1.5   | 2.5   |  |
|---------------------------------------|-------|-------|--|
| # of fibers                           | 2/4   |       |  |
| Diameter [mm]                         | 9.2   |       |  |
| Weight [kg/km]                        | 170   |       |  |
| Bending radius (dynamic) [mm]         | 220   |       |  |
| Allowed tension (Service) [N]         | 1500  |       |  |
| Allowed tension (installation) [N]    | 2000  |       |  |
| Allowed crush (long term) [N/dm]      | 3000  |       |  |
| Allowed crush (short term) [N/dm]     | 4000  |       |  |
| Conductor Diameter [mm]               | 2.9   | 3.2   |  |
| Electric current [A]                  | 16    | 25    |  |
| Conductor max electrical resistance @ | 12.1  | 7.4   |  |
| 20°C [ Ω/km]                          |       |       |  |
| Conductor min electrical resistance @ | 0.011 | 0.010 |  |
| 70°C [MΩ/km]                          |       |       |  |

### **Applications:**

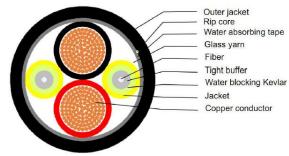
The Novobit Hybrid cables are developed for applications that requires both power and transmission and that benefits from a simple implementation with a single cable, such as small cell deployments or CCTV installations. The UV resistant LSZH jacket enables both indoor and outdoor usage and with CPR B2ca approved for fixed indoor installations within Europe.

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| Standards            |                        |
|----------------------|------------------------|
| IEC 60794-1-2 F1     | Temperature            |
| IEC 60794-1-2 E1     | Tensile Performance    |
| IEC 60794-1-2 E3     | Crush Resistance       |
| IEC 60794-1-2 E4     | Impact                 |
| IEC 60794-1-2 E6     | Repeated Bending       |
| IEC 60794-1-2 E7     | Torsion                |
| IEC 60794-1-2 E11    | Bending                |
|                      |                        |
| IEC 60754-1/-2       | Zero Halogen,          |
| EN 50267-1-2/-2-2    | non-corrosive gases    |
| VDE0482-267-2-1/-2-2 |                        |
| IEC 60332-1-2        | Flame retardant        |
| EN 60332-1-2         |                        |
| VDE0482-332-2-1      |                        |
|                      |                        |
| IEC 61034-1/-2       | Minimum smoke emission |
| EN 61034-1/-2        |                        |
| (EN 50268-1/-2)      |                        |
|                      |                        |

#### **Structure**

- 1. 2x900µm tube with each one fiber
- 2. LSZH inner jacket with FRP strength elements and aramid yarn
- 3. 2 copper conductors
- 4. Water-blocking Glass yarn with rip cords
- 5. LSZH outer jacket





# **Variants**

| Part No.      | Name              | - 1     | No. of tubes | No. of fibers | Diameter | Weight  | Tensile | Crush  |
|---------------|-------------------|---------|--------------|---------------|----------|---------|---------|--------|
|               |                   |         |              |               | (mm)     | (kg/km) | (N)     | (N/dm) |
| NEGAGRIAGO    |                   | 0.45    |              |               |          | 170     | 4500    |        |
| NFC13BU02-2-/ | A Hybrid 2x1.5+2f | 2 x 1.5 | 2            | 2             | 9.2      | 170     | 1500    | 3000   |
| NFC13BU02-4-  | A Hybrid 2x1.5+4f | 2 x 1.5 | 2            | 4             | 9.2      | 170     | 1500    | 3000   |
| NFC13BU02-2-I | B Hybrid 2x2.5+2f | 2 x 2.5 | 2            | 2             | 9.2      | 170     | 1500    | 3000   |
| NFC13BU02-4-I | B Hybrid 2x2.5+4f | 2 x 2.5 | 2            | 4             | 9.2      | 170     | 1500    | 3000   |