## 04 <br> MIDSPAN OPTICAL CABLE FOR FTTH

- Cable structure



## - Featurs \& application

- Design for GPON optical distribution network, and connect the splitter boxes in the same direction, selt-supporting aerial.
- This midspan optical cable is designed for easy and economical installation with high tensile strength to overcome wind pressures with maximum span can be up to 100 m ;


## Mechanical \& Environmental Characteristics

| SPECIFICATIONS | PARAMETERS |
| :--- | :--- |
| Number of optical fiber | $04 \mathrm{Fo} \div 16$ Fo |
| Out sheath diameter | $7.0 \mathrm{~mm} \div 11.0 \mathrm{~mm}$ |
| Maximum span | 100 m |
| Maximum load (installtion) | 2700 N |
| Maximum load (Operation) | 1300 N |
| Temperature ranger (installtion) | $-5^{\circ} \mathrm{C} \div 65^{\circ} \mathrm{C}$ |
| Temperature ranger (operation) | $-10^{\circ} \mathrm{C} \div 65^{\circ} \mathrm{C}$ |
| Bending Radius (installtion) | $10^{*} \mathrm{D}$ ( $\mathrm{D}=$ Cable diameter) |
| Bending Radius (operation) | $20^{*} \mathrm{D}$ ( $\mathrm{D}=$ Cable diameter) |
| Longevity | $\geq 15$ Years |

Together Build Drean

## I Identification



## I Optical Characteristics

| Specifications | Unit | Fiber tyle: SM-ITU-T G.652D |
| :---: | :---: | :---: |
| *. Geometrical characterstics |  |  |
| Mode field diameter at 1310nm | $\mu \mathrm{m}$ | $9.2 \pm 0.4$ |
| Cladding diameter | $\mu \mathrm{m}$ | $125 \pm 1$ |
| Core-clad concentricity | $\mu \mathrm{m}$ | $\leq 0.6$ |
| Cladding non-circularity | \% | $\leq 0.7$ |
| Coating diameter | $\mu \mathrm{m}$ | $245 \pm 10$ (none color) <br> $250 \pm 10$ (includding color) |
| *. Transmission characterstics |  |  |
| Attenuation at wavelength: $1310 \mathrm{~nm} \div 1625 \mathrm{~nm}$ | dB/km | $\leq 0.4$ |
| Attenuation at 1550 nm | dB/km | $\leq 0.22$ |
| Chromatic dispersion | ps/nm.km | $\leq 3.5$ at $1310 \mathrm{~nm} \quad \leq 18$ at 1550 nm |
| PMD index | ps/km ${ }^{1 / 2}$ | $\leq 0.2$ |
| Zero dispersion wavelength | Nm | $1300 \leq \lambda \mathrm{o} \leq 1324$ |
| Zero dispersion slope | ps/nm².km | $\leq 0.092$ |
| Cut-off wavelength | Nm | $\lambda \mathrm{cc} \leq 1260$ |
| Macrobend loss at 1625 nm (radius $=30 \mathrm{~mm}$ * 100 turns) | dB | $\leq 0.1$ |
| *. Mechanical characterstics |  |  |
| Proof stress | Gpa | $\geq 0.69$ |

*. Using the optical fiber from Corning, Fujikura, Sumitomo and Furukawa.

## - Informations and parking

- The information of the cable is printed per meter length complies with IEEE P1222. Other information will be printed as the request of customer.
- Standard length: 5000m or is packed according to customer's requirements.

