WHEN BIGGER IS BETTER

Cable solutions for longer reach and better performance.
The cabling infrastructure of today and tomorrow faces new challenges. The development of network technology is horizontal in areas which previously were not considered classic users of network products.

Based on office networking and previous length requirements of up to 100m for copper cabling, which comprises smaller company networks like medical practices and law firms as well as data centers and infrastructure for IT service providers, the network technology is also developing in areas of industrial networks where the focus lies on monitoring, control and data collection/visualisation (SCADA applications).

Multimedia networking can be considered a further development trend. This is to be found where not only office or process data need to be transmitted, e.g. in hotels, hospitals (patient area), fairgrounds, airports (passenger areas) or passenger ships.
WLANs/Wifi and high-speed mobile radio like LTE (Long Term Evolution) are meanwhile gaining ground in offices, warehouses and other commercial buildings. WLAN and LAN are growing together and in practice WLAN/Wifi is integrated in cabling structures according to EN50173.

With the new generation WLAN 802.11ac/ad we have the first volume application for 10GBase-T in the office environment.

WLAN/Wifi requires a dense 10Gb/s network (at least class E₆₅) with PoE+ compatibility (NextGen-PoE), perfect in AWG22 design.

These trends have also been taken into account by the international standardisation. CENELEC has published a new edition of EN 50173 for „Information technology - Generic cabling systems“ which is now divided into 6 categories:

EN 50173-1: GENERAL REQUIREMENTS
EN 50173-2: OFFICE BUILDINGS
EN 50173-3: INDUSTRIAL AREAS
EN 50173-4: HOME ENVIRONMENTS
EN 50173-5: DATA CENTERS
EN 50173-6: DISTRIBUTED BUILDING SERVICES
RANGE OVERVIEW

- 20% longer reach at 10GBit
- Reduction of technical space
- Concentration of switches
- Reduction of purchasing costs
- Minimisation of operating costs
- Minimisation of energy costs
- No additional media converters
- More net office space
- AWG22 design optimised for PoE+ / Next-Gen-PoE
- Total cost savings up to 20%

UC LR22 10GBit U/FTP CABLES IN COMPARISON TO CONVENTIONAL CAT.6a CABLES

<table>
<thead>
<tr>
<th>Applications</th>
<th>Channel lengths (incl. patch cable) **</th>
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</thead>
<tbody>
<tr>
<td>10GBase-T</td>
<td>120m</td>
</tr>
<tr>
<td>1000Base-T</td>
<td>120m</td>
</tr>
<tr>
<td>100Base-T</td>
<td>130m</td>
</tr>
<tr>
<td>10Base-T</td>
<td>180m</td>
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</tbody>
</table>

** Requires suitable components and patch cables (see updated data sheet)
TREND-SETTING: UC LR22 10GBIT U/FTP CABLE

The demand for cable solutions with excess length beyond the typical 100m in copper is rising rapidly. In contrast to the traditional office environment, we are talking about longer distances e.g. in the industry, public buildings and modern shipping. In all areas, the net usable space is a precious asset that needs to be optimised.

Thus, the planner faces the daily challenge of reducing the technical space, e.g. by avoiding further sub-distributors and media converters, by minimising operating and energy costs, by integrating WLAN/Wifi infrastructures on large premises and factory halls, and by integrating PoE+ as feed system, to name just a few.

The new compact 10Gbit cable **UC LR22 10Gbit U/FTP LSHF** solves this problem with its outstanding properties.

With a construction in AWG22 design and a diameter of 8.2 mm the cable meets all requirements of the IEEE 802.3 and ISO/IEC 11801 standards with the applications 10GBase-T, PoE and PoE+ and a Class EA Channel up to a length of 120m**.

**Requires suitable components and patch cables (see updated data sheet)**
Because as one of the global leaders in technology we offer high competence in the classical copper as well as the modern fibre optic technology.

You can benefit from the innovative Draka cables and make use of multimedia services of the future, e.g. highspeed internet, TV, surveillance cameras, control and voice communication.

Your cable solutions for longer reach and better performance.

For more information please see:
www.prysmiangroup.com