

Wireless Infrastructure

Connectivity Solutions

Edition 2011



Count on proven wireless Technology





Your partner for connectivity solutions

HUBER+SUHNER is a leading global supplier of components and connectivity solutions for wireless carriers.

HUBER+SUHNER offers technical expertise in radio frequency, fiber optics and low frequency solutions under a single roof, providing a broad range of products that can be relied on in the wireless infrastructure market.

Its broad knowledge in these three technologies make HUBER+SUHNER the leading provider of interconnectivity solutions and innovative services in the communication business, especially in wireless connections.



Technologies

Radio frequency

As a market leader for RF solutions HUBER+SUHNER offers a broad portfolio of components and systems for the wireless market. Our connectors, cables, assemblies, surge protectors and antennas cover all requirements that are requested for indoor and outdoor applications. You can also expect innovations created by HUBER+SUHNER in the field of test & measurement. Our test leads, low PIM adaptors, intermodulation loads, IM Standards and Quick Mate Adapters comply with the highest requirements that guarantee high quality connections.

Fiber optics

HUBER+SUHNER also offers an extensive range of fiber optic components as well as transmission and distribution technology systems specially adapted to the requirements of remote radio head systems. In addition to fiber optic cables and connectors, the range includes customer-specific assemblies, turnkey cabling systems, innovative distribution solutions and customised FO feederline cable solutions.

Low frequency

Based on the low frequency technology HUBER+SUHNER delivers individual LF power feederline cable solutions that meet the requirements of the wireless market. For challenging systems we offer customised solutions meeting special needs in a world of combining technologies.

Services by HUBER+SUHNER

Our many years of experience and highly diversified know-how ensure that our customer's requirements are implemented efficiently and to the highest standard. We provide comprehensive services starting from the design stage to the completed system solution, and our experience gained in major global projects enable us to advise our customers on the right product choice, method of installation and network design. We also ensure to meet the logistic expectations of our customers, independent of high volume bulk shipments or fast and flexible on-site services with short lead-time requirements.

Conventional cell site installations



LISCA jumper cables

- Excellent radio frequency performance
- PIM optimized -150 to -165 dBc
- Moisture protection IP68
- Low attenuation
- Factory-made cable assemblies
- Test leads for low intermodulation test equipment
- Low, stable passive intermodulation products (PIM)



QUICK-FIT connectors

- Rugged connectors for easy field termination of corrugated feeder and jumper cables
- Lowest possible PIM
- Moisture protection IP68
- Quick and easy field installation
- Multi-brand cable compatibility



SL 60 point-to-point antenna

- Next generation networks backhaul
- License-free 60 GHz wave band
- Net throughput 320 MBit/s full duplex
- Up to 1'600 m
- Integrated flat antenna



SUCOFEEED cables

- Low attenuation
- UV-resistant
- Outer contact in copper or aluminum
- Designed for:
 - harsh environment
 - extreme heat
 - high humidity
- High RF shielding efficiency



GPS antenna

- Small, unobtrusive and lightweight design
- Integrated lightning protection
- Integrated high gain, low noise figure LNA
- Supports improved operational reliability of BTS site

**Power splitters**

- Low return and insertion loss
- Frequency range from 360 MHz to 6 GHz

**Lightning protectors**

- Available for all mobile communication bands including LTE
- Excellent broadband radio frequency performance and PIM optimized
- High lightning current handling capability
- Elevates system availability
- Best suited for outdoor installations

**Grounding kit**

- Fast, easy and reliable installation
- No loose parts
- Low contact resistance $\leq 1 \text{ m}\Omega$
- IP 67

**Test-kit for low-PIM on site measurement**

- Use of high performing PIM components
 - N and DIN 7/16
 - Load
 - Standard / Source
- High mating cycles
- Low PIM and cable impairment test-kit



Remote Radio Head installations



Individual fiber optic feeder cable solutions

- Factory terminated (ODC to LC, LC to LC) jumper assemblies
- ODC extension assemblies for cable extension in the field
- Full length flexibility
- Plug-and-play installation on mast
- Overlength boxes to store excess cable length



Distribution box solutions

- Transition box with ODC/LC adapters
- Strain-relieved cable entry for MASTERLINE
- 3 cable glands with 4 jumpers per gland
- Plus pole mounting kit



MASTERLINE classic/extreme solutions

- Factory terminated and quick installation
- Only ONE cable assembly
- No need for distribution boxes
- Easy and reliable installation
- Double-ended 24 LC to LC MASTERLINE
- Staged pigtails with pulling tube
- Non-staged pigtails at base station



Fiber optics and power solutions

Individual low frequency power feeder cable solutions

- 6,8,10 AWG factory terminated assemblies
- 12 AWG RRH jumpers
- Individual cable reels
- Low frequency power distribution box
- Low frequency power bund



Power box solutions

- Distribution box for power supply
- Hybrid distribution box
- With overvoltage/surge protection
- Integrated grounding



Re-use of corrugated copper cables solutions

- DC power adapter for corrugated cables
- Fiber optic cable inside inner conductor
- For swap from existing corrugated system to RRH system



Smart DC kit for alternative FTTA powering

General description

The inner and outer conductors of a redundant corrugated feeder cable are used for the power supply. Our Smart DC kit is a special adapter fitted at both ends of the corrugated cable, guaranteeing secure and reliable contacts. Short DC jumpers connect the distribution boxes on top and at the bottom. Our Smart DC kit can be supplied with factory assembled pigtails for this purpose.

Features

- DC current rating 40 A
- Lightning current handling 50 kA
- Waterproof IP 67
- Kits for cable sizes 7/8", 1 1/4" and 1 5/8"
- Multibrand cable compatibility
- Optimized for DC cable NYCWY 2×16RE/16

Benefits

- Saving installation time and costs
- Quick and easy field installation
- Tooling support for both - stripping and easy coax flaring

TÜV certified according to IEC/EN 61984!

Trimming tool for coaxial cable 7/8"

- Type 74_Z-0-23-18
- Item no. 84074476



Adaptors between power and redundant cables

Material

- Body in brass, nickel plated
- Contact holder in brass, nickel plated
- Centre contact in CuBe, nickel plated
- Cable gland in brass, nickel plated

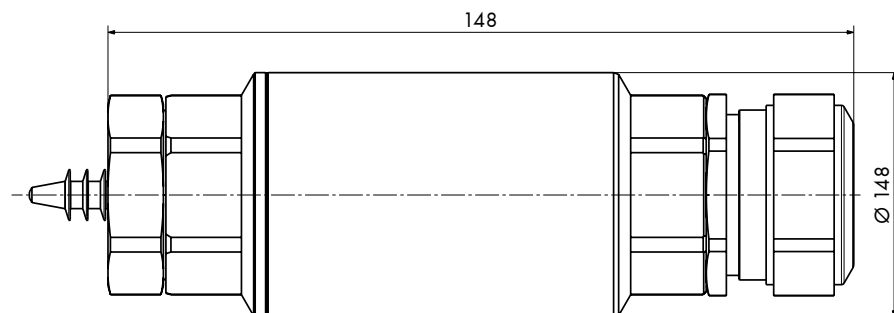
Available for corrugated cables

- SUCOFEED 7/8"
- SUCOFEED 1 1/4"
- SUCOFEED 1 5/8"



Smart DC kit adapter for coaxial cable 7/8"

- Type 73_Z-50-23-5
- Item no. 84117348



HUBER+SUHNER is certified according to
ISO 9001, ISO 14001, ISO/TS 16949 and IRIS.

WAIVER

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.

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