

1.8 GHZ PASSIVES

High-Quality Product Portfolio

Product Brochure Rev. 1.00/03.2021





WELCOME INTRODUCING TELESTE

Teleste offers an integrated product and service portfolio that makes it possible to build and run a better networked society. Our solutions bring television and broadband services to your home, secure your safety in public places and guide your use of public transport.

Steady and Persistent

With solid industry experience and drive for innovations, we are a leading international company in optical broadband actives and passives, security and information technologies and related services. We connect with our customers through a global network of offices and partners.

The 1.8 GHz Passives Portfolio is a carefully selected, ever-increasing, high-quality portfolio of outdoor & indoor Passives components. It comprises of a hand-picked selection of a vast range of products that we traditionally supply to customers.

In this brochure we present our outdoor and indoor splitters & taps, wall outlets and galvanic isolators along with signal conditioning devices such as cable simulators, attenuators and filters. All products are tested to industry standards and undergo quality assurance checks.

Our splitters & taps are designed to be compatible in specification and performance up to 1.2 GHz to our current product ranges. In this way you can replace existing products with our new 1.8 GHz versions without any need to undertake network re-planning or re-siting of products. We utilize at every operational stage, a lean way of working, which contributes to our ability of being able to supply high-quality products at global competitive price levels, combined with world-class customisation capabilities.

We Can Support You Wherever You Are

Teleste maintains a considerable stock of Passives in our main distribution centre in Belgium. Thereby we are able to serve with overnight, just-in-time deliveries to all corners of Europe.



Learn more about the 1.8 GHz Passives Portfolio by scanning the above QR-code with your smartphone.

Furthermore we constantly try to improve our Logistic Eco-Efficiency methods, such as e.g. 'carpooling' to achieve optimal transportation capacity, which reduces both ${\rm CO}_2$ emissions and cost.

We have been around for more than 65 years and will continue to bring about a SMART, SAFE and SMOOTH future.

OUTDOOR PASSIVESSPLITTERS & TAPS

Outdoor passives are designed to be placed in chambers or street cabinet locations. Their housings are well screened to meet and exceed the Cenelec Class A+ standards.

4SP SPLITTERS

Outdoor Splitters are high performance passives designed to split signal and power in coaxial trunk and distribution lines of HFC networks.

- High performance for extreme environmental conditions
- Weather resistant powder coating
- F-ports DC blocked for extended surge resistance
- IP68 Protection Class





4TP TAPS

Outdoor Taps are high performance passives. The signal and power are constantly present on IN and OUT ports while the Tap ports are used to feed the subscriber outlets.



- High performance for extreme environmental conditions
- Weather resistant powder coating
- F-ports DC blocked for extended surge resistance
- IP68 Protection Class
- Wide range of different line taps (ports # and values)



OUTDOOR PASSIVES Cont.

4DC DC COUPLERS

Outdoor DC Couplers are high performance passives to split signal and power in coaxial trunk and distribution lines of HFC networks.

Highlights

- High performance for extreme environmental conditions
- Weather resistant powder coating
- F-ports DC blocked for extended surge resistance
- IP68 Protection Class



4LPI LINE POWER INSERTERS

Outdoor Line Power Inserters are high performance passives that are designed to allow voltage to be put on a coaxial cable line so as to provide power to various amplifiers and electronic devices.

- High performance for extreme environmental conditions
- Weather resistant powder coating
- F-ports DC blocked for extended surge resistance
- IP68 Protection Class





4RTP ROTATABLE TAPS

Outdoor Rotatable Taps can be installed with faceplates fitted in either left or right positions thus giving the operator the ability to reverse the signal direction as needed. The signal and power are constantly present on IN and OUT ports while the Tap ports are used to feed the subscriber outlets.

Highlights

- High performance for extreme environmental conditions
- Weather resistant powder coating
- IP68 Protection Class
- Faceplate can be mounted either way around on the housing depending on the direction of signal



40-SERIES

4O-Series Splitters, Taps and Power Inserter are high performance devices used for splitting signals and power in coaxial branch and distribution networks.

- High performance for extreme environmental conditions
- Intended for use in branch and distribution networks
- Test point/probe monitoring connections
- Plug-in modules in various dB values





4LINE SPLITTERS

Indoor Splitters are designed for the splitting of signal to output ports are available in different port counts and connector positions.



- Very good intermodulation performance
- Superior housing design ensures fast and easy installation





4LINE TAPS

Indoor Taps are designed for the input signal to be passed further down the line as well as splitting of the signal to customer ports.



- Very good intermodulation performance
- Superior housing design ensures fast and easy installation



WALL-OUTLETS & ISOLATORS

4MMO

This range of superior performance Wall Outlets provide operators with increased frequency range built into a high performance housing. These wall outlets are designed to allow operators to build their networks in the best way possible.

Highlights

- A wide range of wall outlet versions
- Push button construction for the coaxial cable inner conductor
- High port-port isolation
- Superior design ensures fast and easy installation
- Terminated & loop through versions built with directional couplers and diplex filters

4SOT

4SOT is a next generation Wall Outlet that utilises Teleste's unique cable clamping technology. This ensures excellent connection between the cable and the wall outlet and is achieved in a way that is easy and simple to install.









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4APG

This series is a unique modular approach for next generation Wall Outlets. It consists of a galvanic isolator, filter and installation brackets and covers enabling it to be fitted into a wide range of modular systems. Our award winning Clamp technology is incorporated to provide input and output connections.

Highlights

- Outstanding RF performance
- Ultra low leakage current
- Nickel plated housing/contacts
- Small to allow easy fitting inside frame/electrical wall box





4GIW-Fx00F

4GIW range are a range of high quality Fully Isolated System Outlets which are used to galvanically separate the coaxial access network from subscribers premises. They prevent issues caused by electrical problems such as voltage surges and lightning from damaging Customer Premise Equipment.

- Protection against power surges
- Compact design with Zinc Alloy die-cast housing & Tin plated soldered back
- 1-port and 2-port versions available





IN-HOME PASSIVES

CABLE SIMULATORS 4CS

Cable Simulators can ideally simulate cable loss from 5-1800 MHz in HFC systems.

The product range contains several values.

Highlights

 Extremely small dimension for cost saving and ease of installation



INLINE ATTENUATORS 4FAM

Inline Attenuators are used when extra attenuation is needed in the signal path. The product range contains several attenuation values. With F-female/F-male connectors, the attenuators can be mounted directly on a F-connector without the need of adapters.

- Extremely small dimension for cost saving and ease of installation
- Several attenuation values available



RETURN PATH ATTENUATORS 4RAFxx-65/204

Return Path Attenuators are used when extra attenuation is needed only in the return path. With F-female/F-male connectors, the attenuators can be mounted directly on an F-connector without the need of adapters. The return attenuators can also be used to reduce ingress problems.

Highlights

- O-ring in F-male port to ensure waterproof seal
- Excellent return loss
- Several attenuation values available



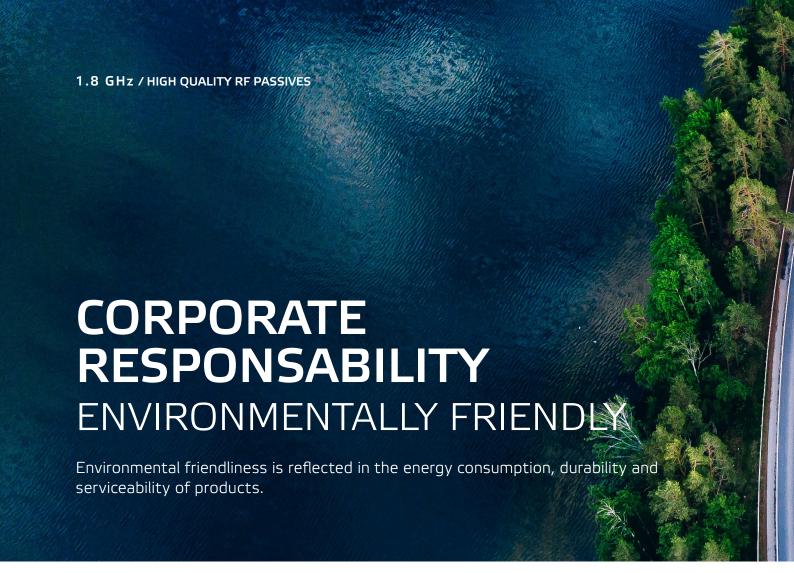
HIGH PASS FILTERS 4HPF-105/258

4HPF-105 or 258 are High Pass Filters passing the 105-1800 MHz band or 258-1800 MHz band, the stopband is from 5-85 MHz or 5-204 MHz.

- Innovative design giving cost efficient
- Superior performance in a very small tubular housing







Design

Product development plays a key role in our consideration of the product life cycle environmental impact. Decisions made at the design stage have great significance for the entire product life cycle, as they cover the entire supply chain from the procurement of raw materials to the removal of the product from the market. Environmentally conscious product design aims to reduce material volumes, cut energy consumption, extend the life cycle of the network infrastructure as a whole and improve product quality. Modularity is an important aspect in product design, and nearly all of the HFC access network products are modular.

Sourcing

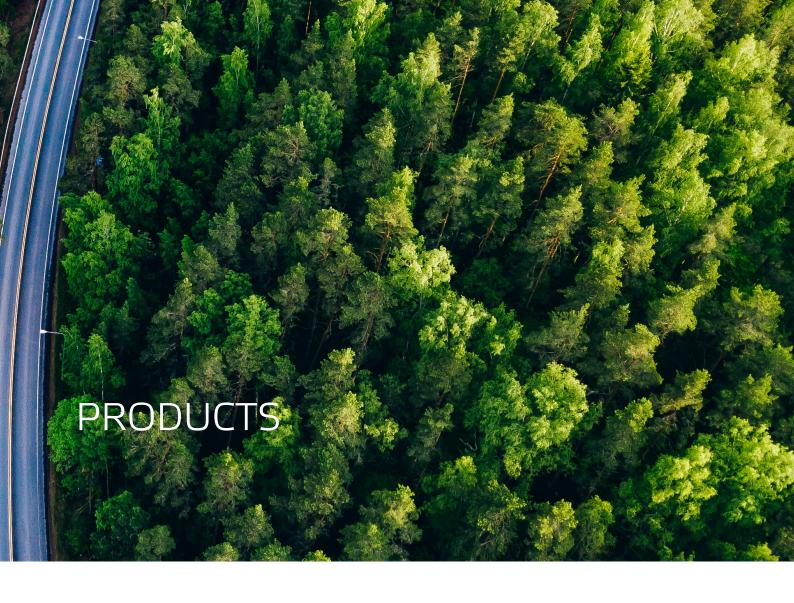
Teleste's international supplier network consists of suppliers from more than 20 countries. In direct purchases, 20 per cent of suppliers account for 80 per cent of all sourcing. Co-operation with suppliers is based on annual contracts and a long-term approach. The co-operation is steered and monitored through the Code of Conduct, guidelines concerning functions

such as logistics and order processing, supplier evaluations, supplier self-evaluations, meetings and audits

Sourcing is divided into two main categories. Direct sourcing concerns the various components, products and services needed in the assembly of Teleste's own products. Indirect sourcing concerns goods and services that we use for our own business operations. Teleste always strives to ensure that materials come from ethically and environmentally responsible sources. The company uses a third-party service to maintain the necessary information pertaining to the legitimate trade of natural resources and supply chains in line with sustainable development. The third-party service monitors the origin of the raw materials used in standard components (conflict minerals, 3TG).

Production

The most significant sources of environmental impacts in Teleste's manufacturing are energy consumption and the waste generated by the company's operations. Teleste's production operations consist of the manufacture, assembly and



testing of electronics. All of these processes are environmentally safe. Production efficiency is maintained by using the lean approach. One aspect of quality development in production is the use of continuous improvement boards (JAPA boards). In 2018, JAPA activities were extended to cover employee processes, and the first office robotics applications have been implemented for the update of forecast and control parameters. In addition, Teleste applies the 5S method in its production. This method focuses on improving productivity by eliminating non-value-adding activities, improving quality and safety and creating a visually attractive, efficient workplace. The Recycling and reuse section includes more details about the sorting of waste.

Logistics

Our logistics management takes into account environmental questions and cost-efficiency alike, which are typically mutually supportive goals. Cost-efficient logistics often also results in the smallest carbon footprint. The carbon footprint arising from transport results mainly from the transport of materials and finished products. It is reduced by prioritising rail and sea transport in intercontinental

logistics over air cargo and by consolidating shipments when possible. In 2019, we were able to reduce the CO2 emissions arising from air transport by as much as 29% compared to 2018.

Usage

Teleste's products are safe throughout their production process and service life. The design of products takes into account the full product life cycle, including availability, service life and serviceability. The upgradeability of products with long life spans is part of the environmental perspective. Customer satisfaction is guaranteed by long-lasting and serviceable products with energy consumption matching the set targets. Teleste continuously develops its access network products to allow its customers (operators) to reduce their network electricity consumption relative to the amount of data transmitted.

Recycling and reuse

The sorting of waste at source is essential for efficient recycling and reuse. At Teleste, all waste generated is appropriately sorted for recycling.



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