Fujikura

Fibre To The Home

Your complete innovative Solution

www.fujikura.co.uk

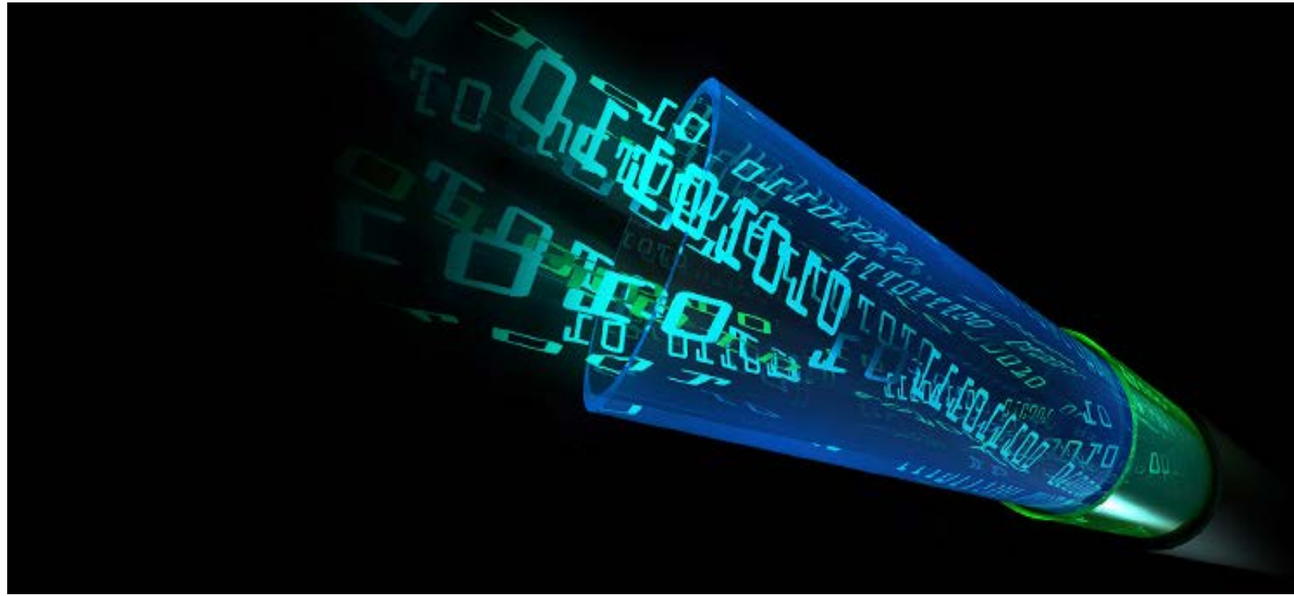
FTTH and its benefits

Fibre-To-The-Home (FTTH) is the ultimate technology for delivering high speed broadband to consumers.

The term "Fibre Broadband" is sometimes misused, referring to "Fibre-To-The-Cabinet" (FTTC) technologies such as VDSL and DOCSIS, but true FTTH brings the transmitted light signal from the operators exchange directly into the consumers' home using optical fibre for the entire route.

FTTC is often chosen by operators due to the costs associated with replacing the existing copper connections with fibre. Actually, the cost of installing fibre is no more expensive than installing copper (if you start from a clean slate), but operators have previously deployed a copper infrastructure and they need to maximise their previous investments.
However the last copper connection is ultimately limited in its capacity, and eventually the transition to fibre will need to be made.

The goal is to make this jump from copper to fibre as easy and cost effective as possible, and that is what Fujikura has been doing in Japan since the mid-nineties.



Industry Challenges

The major challenges that operators face with FTTH relate to the rate of return on their investment and this is most pronounced when it comes to installing optical fibre from the street cabinet to the consumer's home. It is impossible to predict the rate at which consumers take up broadband services, so it is essential to minimise the initial capital expenditure.

Civil works account for the major cost of installing FTTH networks, so it makes sense to design the network and install all of the necessary passive equipment from the start, but planning and installing for 100% consumer take up still leads to high CAPEX, increases the installation time and pushes back the return on investment.

Fujikura's FTTH solution allows operators to obtain 100% coverage of all homes passed with minimal capital outlay and complete flexibility. The subscriber connections can easily be made as users take up services spreading out the investment cost.

Furthermore, when subscribers decide to connect, the installation needs to be quick and the installation tooling must be simple and easy to use for both experienced fibre handlers as well as those engineers from a copper background. Fujikura's solution meets these requirements, and has been successfully deployed by engineers of all backgrounds across the globe.

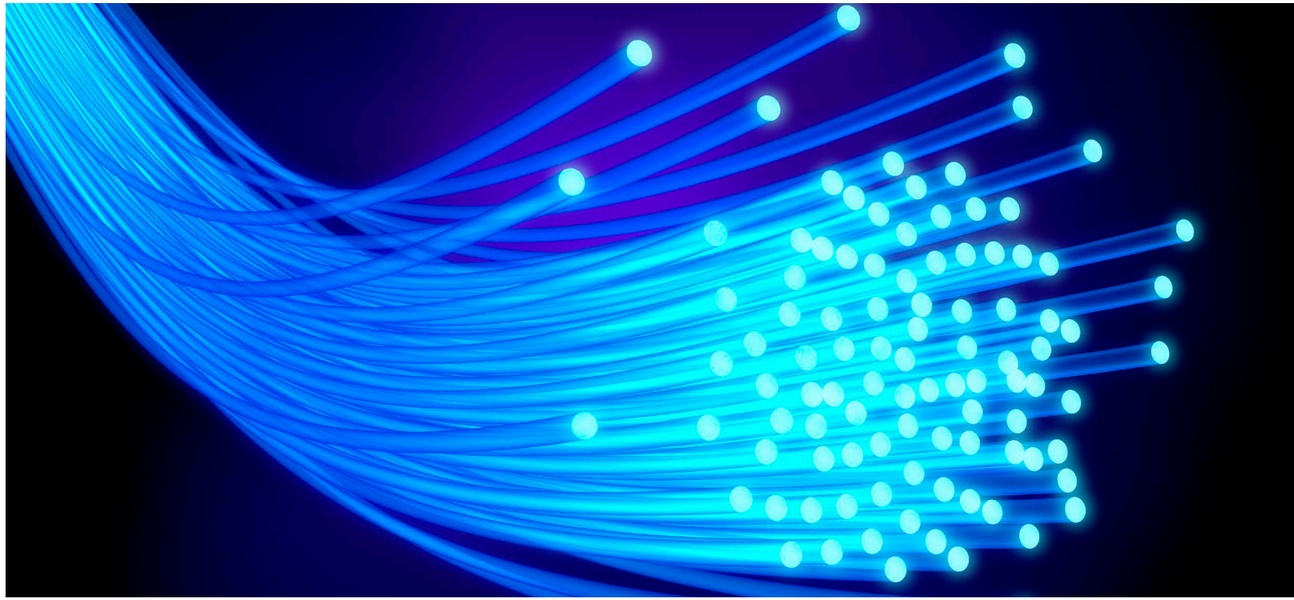
Aerial access FTTH solution

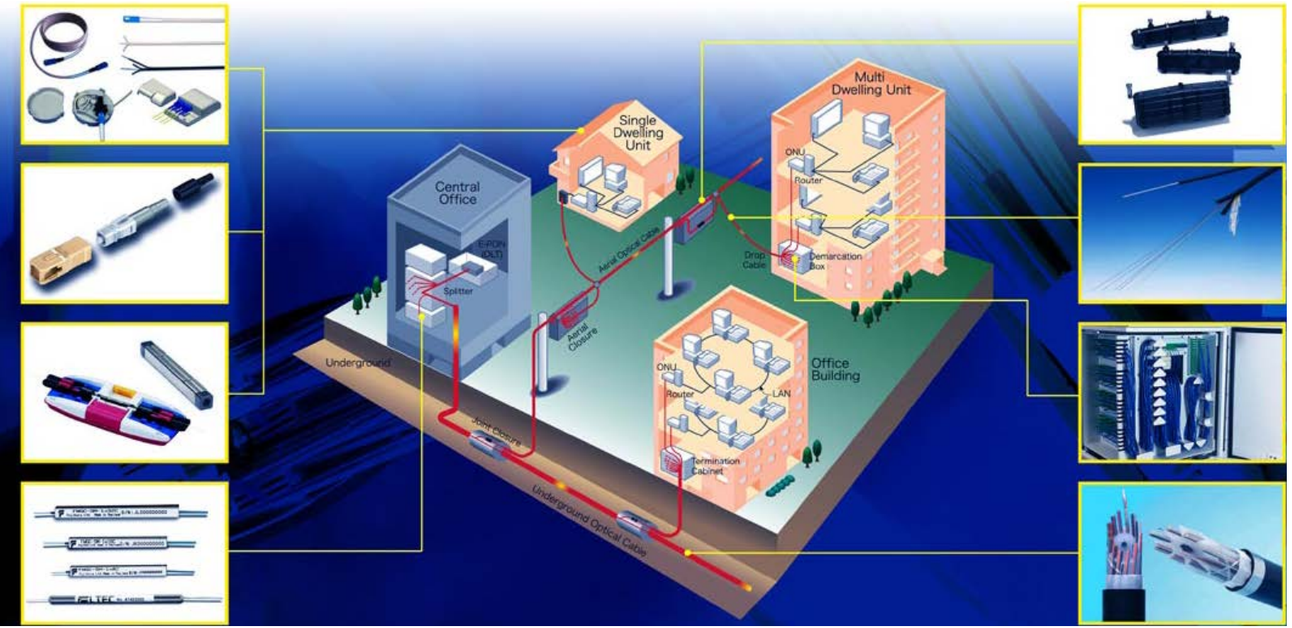
In many regions FTTH is deployed underground in ducts or buried directly. This is certainly the best solution for many operators. However ducts are often limited in space, difficult to access and sometimes become restricted with debris. A solution to this is to use aerial cables, but these also have problems.

Traditional aerial deployments utilise cables with the supporting member at the centre of the cable surrounded by tightly packed optical fibres. This requires the network to be fully designed and installed from the start, including all of the associated closures and splitters.

Alternatively, aerial cables can be coiled at the top of the poles to allow for closures to be added at a later date, but this is unsightly, more costly and wasteful both in terms of material wastage as well as storage and logistics.

Fujikura can provide these established solutions but we also provide a unique Aerial Free Access Solution which we believe has many benefits for certain scenarios.





Fujikura`s Free Access Aerial Solution

Fujikura's revolutionary "Free Access Aerial Solution" addresses all of the aforementioned concerns and has been widely deployed in Japan, Asia and Europe.

Fujikura's aerial access cables (SSW) utilise an external supporting cable with the optical fibres easily accessible from below. It's a small, compact design that minimises waste and is durable under extreme conditions. A small excess of fibre is built into the design providing enough spare fibre to allow closures to be added at any point in the network. This means that 100% of the potential subscriber base can be accessed simply by passing their homes with the SSW cable. There is no need to design or install the subscriber connection until services are taken up.

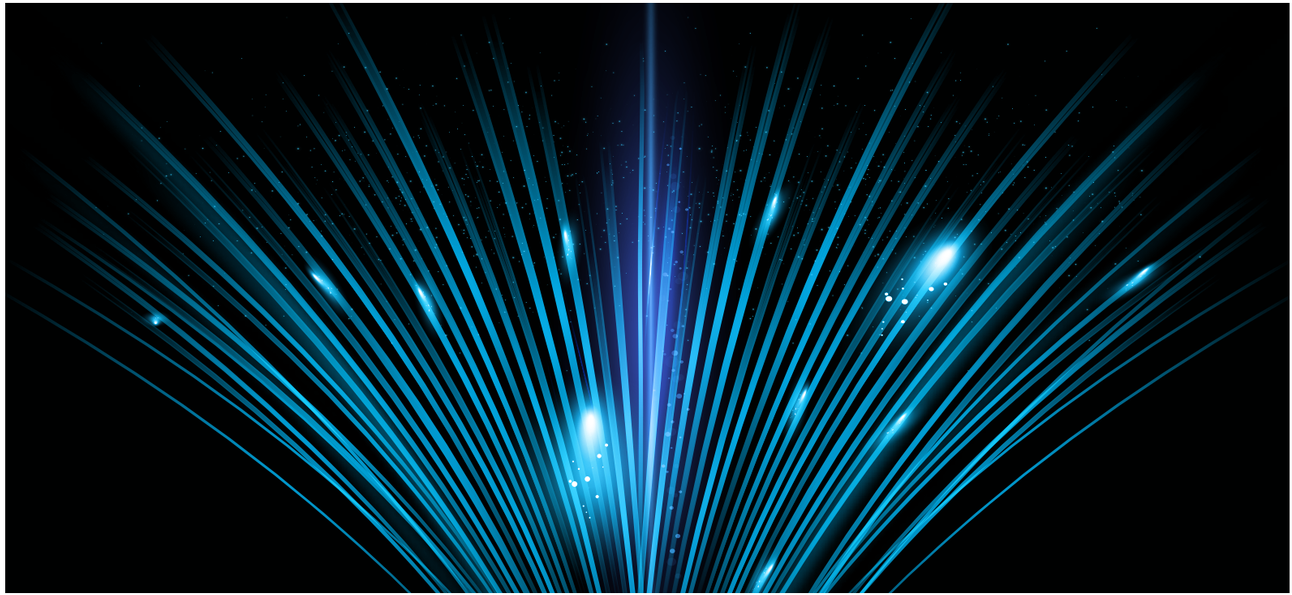
Our pole mounted closures allow the underground cables to connect to the SSW cables. Our aerial closures mount directly onto these SSW cables. The aerial closures are easy to install at any point on the access network, so subscriber connections can be made very quickly with minimal installer training. In the simplest scenario, a single connection can be made without any splitters in the closure but splitters can be added at a later date when multiple connections are needed from the same point....This concept minimises the initial capital expenditure but provides complete versatility and allowing the network to grow as more customers take up the service.

About Fujikura

Fujikura was established in 1885 and has been a pioneer in the field of FTTH since the 1990's. Japan has 23 million homes connected with FTTH, much of which has been designed and produced by Fujikura.

Fujikura is a major supplier of fibre optic cables, Optical fibre, passive components and related equipment to the FTTH deployments across the globe.

Fujikura has a strong international presence with manufacturing and development facilities in Japan, Asia and America, along with an extensive customer support base in Europe.



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