

Bridge XC

Gigabit Through Glass. In Minutes.

Zero Drilling. Zero Hassle. 100% Gigabit.

Meet Bridge XC™

Bridge XC, is a groundbreaking consumer-installable solution developed by pureLiFi, designed to revolutionise the deployment and performance of outdoor broadband Consumer Premises Equipment (CPE). Harnessing the power of LiFi data transmission via light, together with wireless power transfer, Bridge XC enables fast, cost-effective, and disruption-free broadband deployment, empowering providers to bridge the digital divide in urban, suburban, and rural environments.



Bridge XC is available as a stand-alone system or as an embeddable module for integration by CPE OEMs, offering unmatched flexibility for providers and partners.

Product Highlights

Data Rates: Up to 1 Gbps, full-duplex, symmetrical

Power: Up to 25W delivered from indoors to outdoors

Installation: Self-install in minutes; tolerant to misalignment

CPE Compatibility: Accepts any Ethernet input from CPE: 4G/5G/mmWave FWA, fibre ONTs, private 5G, satellite, and more

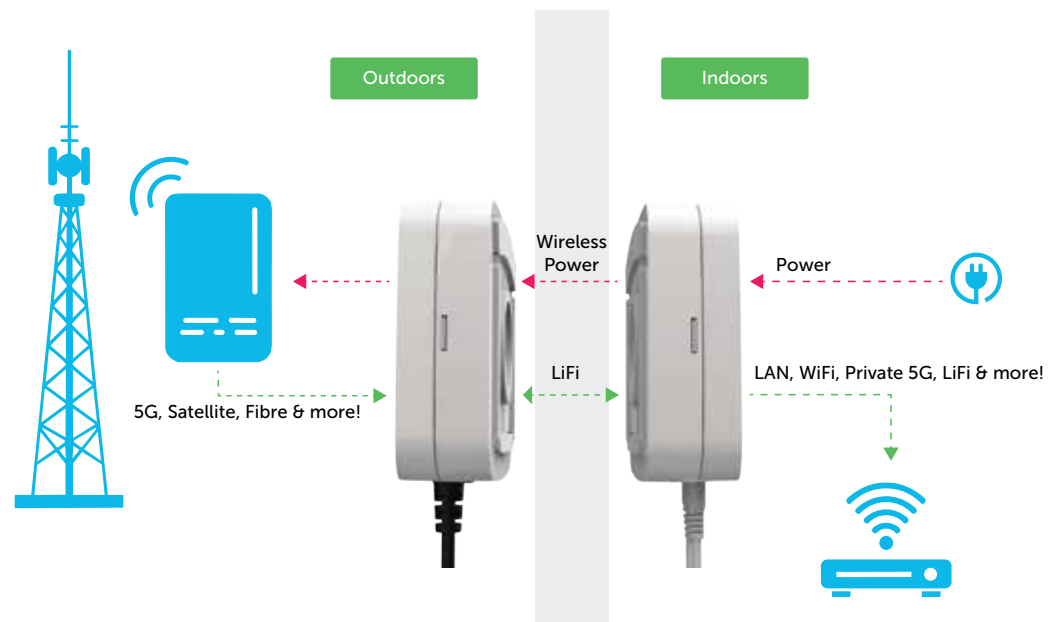
Security: Military-grade, interference-free connectivity, virtually immune to detection and jamming

Alignment Tolerance: High

All-in-One LiFi Connectivity Bridge

Bridge XC is the world's first all-in-one solution for delivering gigabit data rates and up to 25W of power wirelessly through windows. It eliminates the need for drilling, cabling, or professional installation, making gigabit broadband accessible in minutes, not days or weeks. The system comprises compact indoor and outdoor units that form a robust, bidirectional LiFi data link using invisible infrared light, complemented by wireless power transmission. Its design ensures automatic compatibility with a wide range of window types, through patent pending autocalibration, including single, double, and triple-glazed panes, as well as energy efficient Low-E coatings. The window-mounted installation utilises "Gecko® tape", which requires no tools, is highly resistant to all weather types and leaves no residue on removal.

How it Works



Maximising Revenue & Network Efficiency



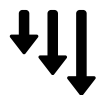
Accelerated Deployment and Revenue

Bridge XC enables rapid, disruption-free broadband roll-out. By eliminating invasive installation procedures, providers can activate services immediately upon delivery. This removes the need for engineer visits, landlord permissions, and complicated cabling, reducing subscriber acquisition costs by more than \$250 per site and shortening time to revenue.



Network Optimisation and Capacity Gains

Outdoor 5G CPE placement using Bridge XC allows FWA operators to serve up to 6x more subscribers with existing network infrastructure on sub-6 GHz 5G and has an even greater impact for mmWave deployments. It overcomes indoor signal attenuation, maximising spectrum investments and improving network efficiency without densification or additional radio infrastructure.



Reduced Operational Costs and Environmental Impact

The self-installable nature of Bridge XC dramatically cuts operational expenses by minimising truck rolls and engineer visits. Each avoided professional installation reduces CO₂ emissions by up to 66 kg*, supporting sustainability goals and circular economy principles.



Enhanced Customer Satisfaction and Retention

Immediate, hassle-free installation means subscribers can enjoy high-speed broadband the same day. Bridge XC guarantees stable, interference-free performance for streaming, gaming, and remote work, even in challenging RF environments, driving premium ARPU and retention.



Universal Applicability and Market Readiness

Bridge XC is broadband agnostic and suitable for residential, commercial, rural, and urban markets. Trials are underway with Tier 1 carriers in the UK, US, Europe, and the Middle East, demonstrating its adaptability and global market fit.

Why Users Love Bridge XC

Bridge XC is the upgrade customers have been waiting for. LiFi supports delivering ultimate streaming, gaming, and work-from-home experiences, wherever they live.



Instant access: Self-install and activate in minutes. No more waiting for engineers or appointments, they get online in minutes. Just Mount



Disruption-free: No drilling, no mess, no landlord permissions required.



Reliable performance: Consistent gigabit broadband for all applications from home working to multi-person gaming and smart home automation.



Security: Physically-contained, interference-resistant connections for privacy and safety



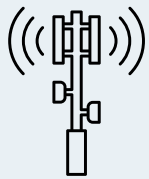
Flexible integration: Works with all major CPE equipment.



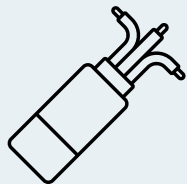
*based on US EPA estimates for commercial truck emissions

Where We Fit

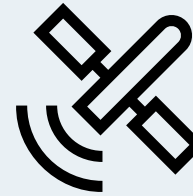
Designed to adapt. Ready to perform. Whether it's a residential living room, a bustling enterprise campus, or a temporary event site, Bridge XC's flexible form factors ensure seamless connectivity in any environment.



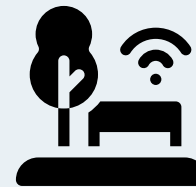
Fixed Wireless Access (FWA): Optimises coverage and bandwidth by relocating indoor modems outdoors, achieving up to 6x cell edge coverage and saving £100s per household in deployment costs.



Fibre ONT Deployment: Simplifies fibre roll-out by enabling self-installation at the window, reducing logistical complexity and speeding up activation.



Satellite Broadband: Delivers connectivity where cabling is impractical, supporting mobile centres, disaster recovery, events, and remote locations.



Outdoor WiFi 7 Extension: Like 5G signals from outdoors to indoors, WiFi signals from indoors to outdoors are blocked by walls and windows. Extends coverage to outdoor spaces ideal for hospitality, events, and transport hubs, with wireless power and data delivery. Also applies to home use for IoT like cameras and backyard/garden connectivity.



Private 5G Networks: Supports premium service for public and private organisations, powering 5G small cells indoors via through-window bridging.



pureLiFi: Pioneering the Future of Connectivity

pureLiFi is the inventor and global leader in LiFi, a revolutionary technology that transmits data through light. With a portfolio of over 100 patents, the company has pioneered the world's first commercial LiFi devices and light antennas.

The company has cemented their leadership by chairing the IEEE 802.11bb committee, securing global standardisation with support from industry giants.

The pureLiFi executive team brings world-class expertise in semiconductors and consumer electronics, fuelling real-world success in defence deployments and Tier 1 carrier trials worldwide.

Combining research excellence with a future-proof roadmap for speed and security, pureLiFi is actively setting the global standard for the next generation of wireless connectivity.