



# **SMALL CELL SOLUTION**



**Swift Deployment  
with Versatile  
Indoor Solutions**

**Comba**

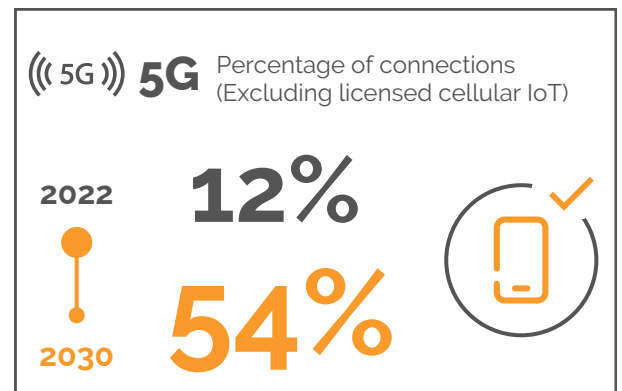
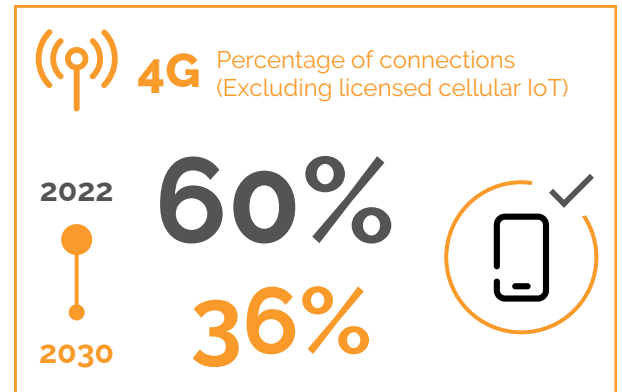
## Who has got you covered?

A well-known fact is that the vast majority (70%+) of the traffic in our mobile broadband networks are generated/consumed indoors. Comba sees this trend extending and even being exaggerated by 5G networks, and this focuses on **the need for dedicated indoor coverage to enhance the end-user experience.**

The Comba small cell solutions cover the need to pursue network excellence without the need to densify the macro network. The basic idea is as simple: **create the coverage where the users are located.** It also saves on the power bill and the site rental expense in most cases.

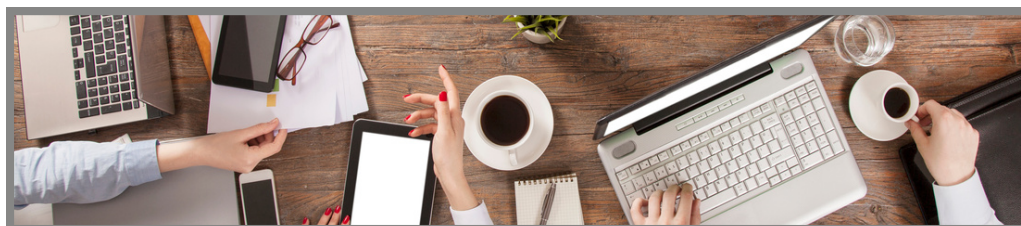
**Reduce churn.** A happy customer served is less likely to churn. The unilateral indoor small cell provides investment protection through high-quality and consistent service.

While one can build outside in coverage, it is often subject to unpredictable/unpreventable changes. In developing urban areas, new buildings and changes in the city architecture present challenges and may very well change existing coverage. Add to this is the annual cell site loss the operators experience each year; it is understandably challenging to keep consistent coverage for some of the most valuable customers with traditional Macro coverage.



Source: GSMA - The Mobile Economy 2023

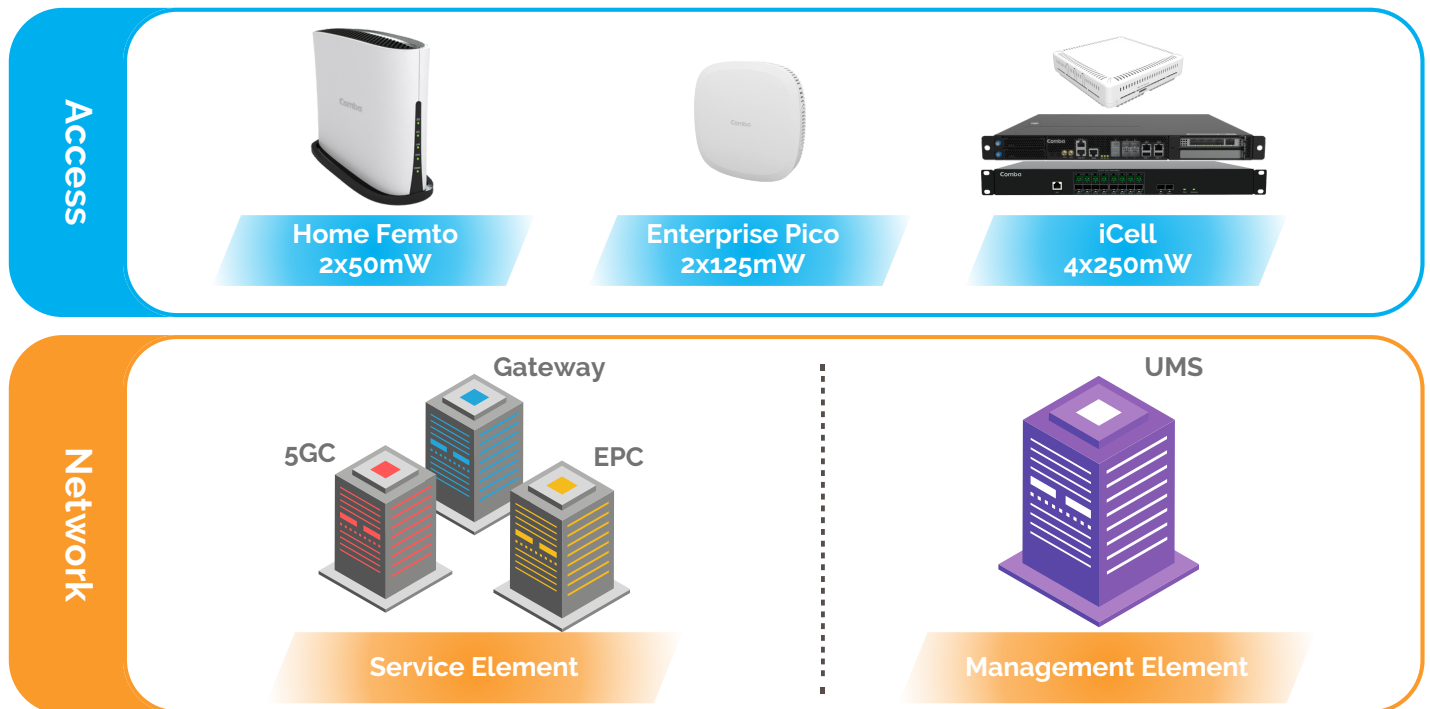
## How to maximize ROI with the right solution?



Choose the right small cell solution according to actual needs, by consider key criteria below:

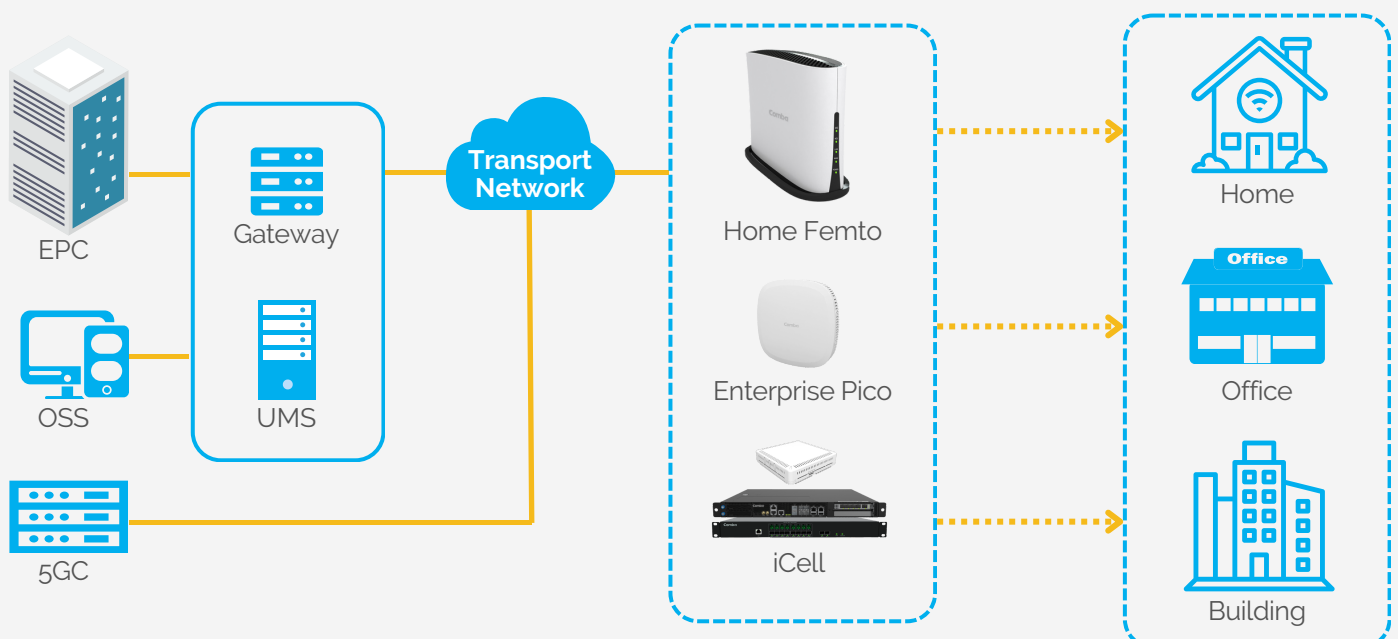
<p><b>Output power of the small cell</b></p>	<p><b>Intended cell coverage</b></p>	<p><b>Regional spectrum allocation</b></p>	<p><b>Capacity requirement</b></p>
--	--------------------------------------	--	------------------------------------

## Small Cell Solutions Overview



## Small Cell Solution for Home, Enterprise and Building

The Comba small cell solutions target three domains **Residential**, **Small-to-Medium Enterprise**, and **Campus**. The solutions enable fit-for-purpose deployments to cater for improved indoor coverage and enhanced data capacity. Typical applications range from hotspot traffic offload to white spots coverage needs.

















## Scenario Oriented Product Design

Comba small cells are designed for a variety of capacity targets to fit each deployment scenario's needs, thus **reducing the total cost of ownership** while **can easily facilitate site acquisition and deployment**.

**Standard broadband networks can be used for the backhaul**, and synchronization can be achieved over these using adaptive clock recovery.

The visual appearance of the indoor units is one of **a contemporary design** that can be naturally blends into a modern office, campus, or home environment.

 <b>Home Femto</b>	 8 Active users	 Home, small office, retail shop	 4G
 <b>Enterprise Pico</b>	 32 Active users	 Small enterprise, business center, club house, cafe	 4G
 <b>iCell</b>	 200/400 Active users	 Big enterprise, hotel, shopping mall, hospital	 4G 5G

## Enable New Value-added Service with Speedy Deployment

Comba Femto helps individuals or enterprise customers access to LTE services in a secure, cost-effective manner.

### Stand-alone Home Femto



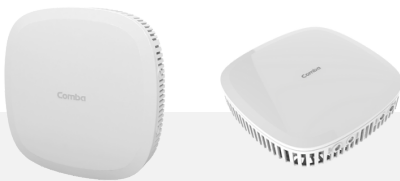
- 8 active users
- 1588 ACR/Air Interface Sync
- Voice recovery technology for VoLTE
- LTE 2x2 MIMO @ 50mW per path



## Build for Today and Adapt for Tomorrow

Comba Enterprise Pico provides a flexible, low-impact and high-performance solution that integrates easily with all core networks.

### Stand-alone Enterprise Pico



- 32 active users
- 1588 ACR/Air Interface Sync
- Voice recovery technology for VoLTE
- LTE 2x2 MIMO @ 125mW per path
- PoE+ Power Supply



## Extensive Indoor Coverage with Boosted Capacity

Comba iCell is a high-capacity solution designed for medium-size multi-story commercial buildings with high demands on user traffic.

### iCell (Distributed Small Cell)



- 200/400 active users
- N48/N77/N78/N79
- 2T2R/4T4R
- NR:4x250mW @100MHz
- LTE:2 x 125mW @20MHz





## Enabling communications, anywhere, everywhere.

We listen and answer to your needs with our experience  
and capability in the industry.

[www.comba-ctnsl.com](http://www.comba-ctnsl.com)

Visit our website or contact our representative for more information.

**Linked** 



 **YouTube**

