

CableFree

W i r e l e s s E x c e l l e n c e

10Gbps+ Wireless Networks



Radio FSO Dependable Gigabit Capacity Reliable MMW MIMO WiFi
4G/LTE Metro Networks Microwave Safe Cities CCTV Resilience

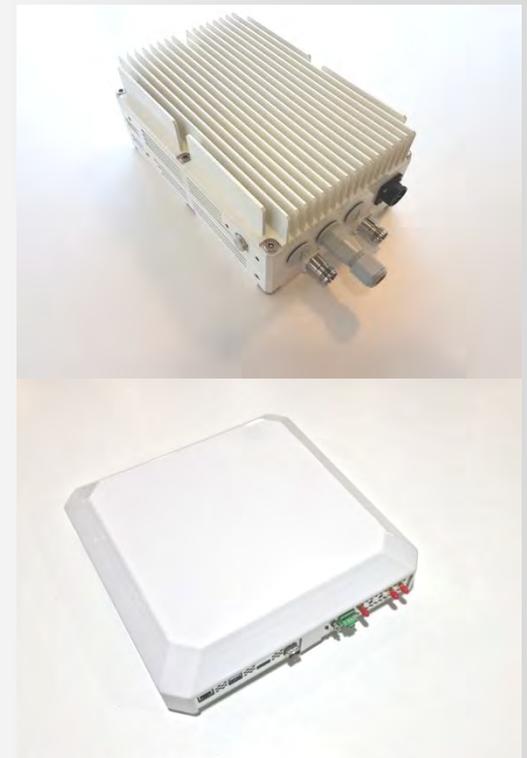
4G & 5G LTE Small Cells: SCF London 2022

www.cablefree.net

Introduction



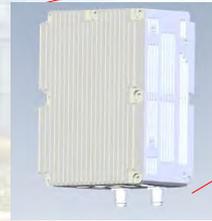
- Advanced solutions for 4G & 5G LTE
- Small Cell & Macro Base Stations
 - Small Cell Outdoor
 - Small Cell Indoor (Pico-cell)
 - Macro: BBU+RRH
 - 2x2 and 4x4 MIMO options
- MNO or Spectrum Sharing bands
 - SS: 1800MHz, 2.3GHz, 3.8-4.2GHz
- Customised versions available



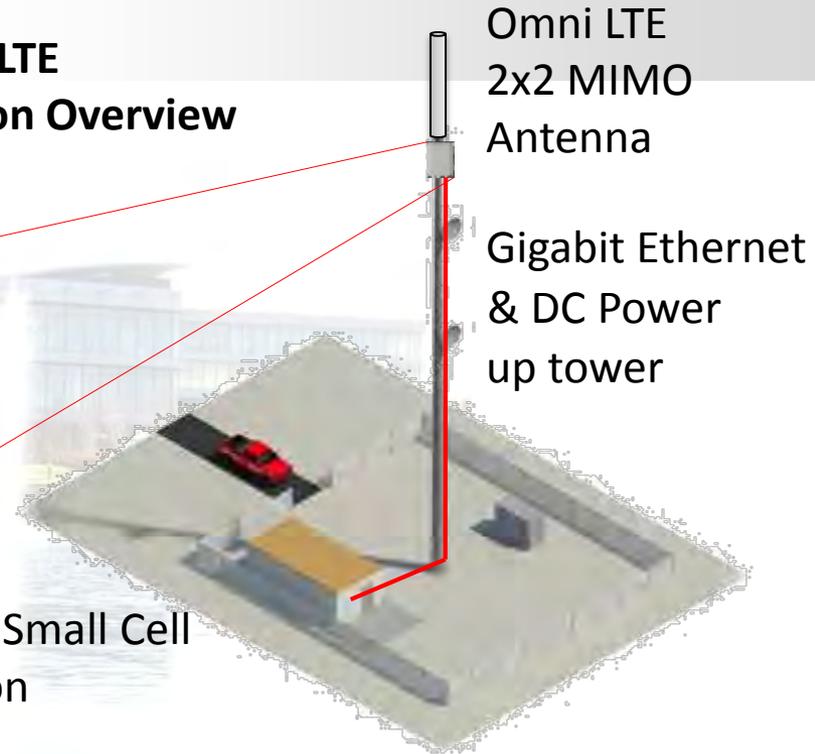
CableFree 4G & 5G Small Cell Base Station

- 4G/5G LTE Small Cell Base Station
- Medium Power, in-fill coverage
- Up to 2x10W total (or 4x10W)
- 1-2 LTE sectors with omni or panel typical for smaller micro sites
- Base Station typically mounted on mast
- Fibre Optic, Microwave or MMW links to core or other sites
- “Stand-alone” capability if no EPC or core required

CableFree LTE Base Station Overview



CableFree
LTE 4G/5G Small Cell
Base Station



Note:
O-RAN versions available

Outdoor 4G & 5G Small Cell Base Station

- Complete Standards-compliant 4G eNodeB/ 5G gNodeB with optional integrated EPC core
- Integrated Full Outdoor Unit
- Transmitter up to 2x10W or 4x10W
- Supports all 3GPP-defined Bands 450MHz to 6GHz, TDD and FDD
- 3GPP Release 12-16 Compliant
- 2x2 MIMO or 4x4 MIMO options
- Gigabit Ethernet Copper and Fibre Interface options
- 48V power connector for power
- Rugged, weatherproof unit
- Integrated or external antennas
- Several RF power versions available



Indoor 4G & 5G Small Cell

- 4G / 5G Indoor Small Cell
- Integrated, highly efficient design
- Low power for indoor: < 2x250mW
- Supports all 3GPP-defined Bands 450MHz to 6 GHz, TDD and FDD
- 3GPP Release 12-16 Compliant
- 2x2 MIMO or 4x4 MIMO options
- Gigabit Ethernet & DC power to Small Cell unit
- 1Gbps Ethernet Copper and Fibre Interfaces on unit
- 48V power connector for power
- Rugged, wall/desk/ceiling-mount unit
- Integrated or external antennas
- GNSS input connector for Network Sync



Outdoor 4G & 5G Smart Pole

- Smart Pole with integrated Small Cell
- Multiple function “Street Furniture”:
 - 4G or 5G Small Cell & Antenna
 - EV Charging
 - WiFi 6m Hotspot
 - mmWave 60GHz backhaul or FWA
 - Optional street lighting
- Slim 180mm “pencil” design
- Highly Customisable
- Meets demands for urban, suburban & rural connectivity
- Many countries have mandate for on-street EV charge points: “dig once”
- Neutral Host & O-RAN capable



CableFree 4G & 5G Small Cell Radios

- Full range of Small Cells for 4G & 5G
- Available today
- Uses x86 platform, not SOC CPU
- Bands: Spectrum Sharing & MNO up to 6GHz
- Future-proof: 4G up to 5G upgrade in software
- 5G Release 16 supported
- 2x2 & 4x4 MIMO supported



Any Questions ?

Please contact us:



CableFree: Wireless Excellence

www.cablefree.net