Urban Based Infrastructure Solutions

Making Connected Cities a Reality

Bring complete wireless coverage to the densest urban environments

As mobile network operators roll out 5G globally, cities everywhere have new opportunities to enhance the lives of the people who live and work in dense urban environments. While the average user is looking forward to faster, more flexible access to data-intensive video, music, and social media services, city planners and managers are excited about the potential 5G brings for very different reasons.

5G powers connected cities

For cities, a 5G communications network is the key to delivering real-time services that have a very real impact on operational efficiency, quality of life, sustainability and public safety. The opportunities are almost endless:

- Traffic flows are streamlined to keep people and vehicles moving, reduce the potential for accidents and minimize pollution
- City services, such as trash collection, are optimized to keep city streets clean and reduce fuel consumption
- Smart parking systems direct drivers to available spaces to reduce frustration and vehicle idling times
- Automated toll collection systems make it faster and easier to pay for parking
- Seamless connectivity keeps people connected as they move indoors and out
- Automated street lighting enhances security
- Smart displays keep people informed and aware

Connected urban infrastructure brings 5G to street level

To take full advantage of 5G's bandwidth and download speeds, cities must bring communications infrastructure closer to street level, where people and vehicles are located. By some estimates, cities will need up to 10 times the number of radios and wireless access points they have in urban areas today to deliver on the promise of 5G.

With the right connected urban infrastructure, cities can take 5G coverage and capacity throughout any urban area. They can support critical new communications and services today and tomorrow with futureproof infrastructure that blends into the surrounding landscape and becomes part of the city fabric.

RFS IS YOUR ONE-STOP-SHOP
for connected city infrastructure

Our Urban Based Infrastructure (UBI) solutions give mobile network operators, neutral host providers and enterprises all of the connectivity solutions and services they need to bring 5G to street level and deliver connected city applications.

You have a single infrastructure partner for everything from the street pole to integrated cables, antennas and filters that minimize interference and optimize smart city application performance. And we support all of our UBI solutions with:

A comprehensive range of installation, maintenance & commissioning services

Management and monitoring software

URBAN INFRASTRUCTURE CONFIGURATIONS FOR ANY REQUIREMENTS

Choose from a range of UBI configurations and a flexible set of options and features to support any combination of commercial, public safety and public service communications:

- Poles **up to 16.7 meters** (55 feet) tall that support **up to 12 radios**
- **Small cell and 4G antennas** for the coverage area & frequencies needed in each location
- **5G radios** with embedded antennas
- **Millimeter wave** (mmWave) **radios** with integrated antennas
- **Wi-Fi access points**
- **Security cameras**
- **LED smart lighting**
- **LED displays for advertising**, public service announcements & emergency notifications
- **Emergency call** buttons
- **Environmental sensors** for pollution & hazardous situations
- Electric Vehicle (EV) **charging stations**

RFS Urban Based Solutions are **available in a wide range of configurations** to meet the needs of the specific urban location. **Here are several sample configurations below.**

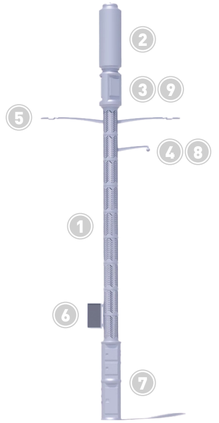
1 CommStreet 1

Best for: Locations where high-capacity wireless coverage for multiple operators and additional services are needed

Height: Up to 16.7 meters (55 feet)

Features and options

1. Up to 12 radios supporting multiple providers with separate and secure cabinets and the potential to enclose multiple base transceiver stations (BTSs)
2. Small cell and 4G antennas
3. 5G and mmWave radios
4. Security camera
5. LED smart lighting
6. LED display
7. Control and power:
   - Pole and IoT communications hub
   - Radio communications support
   - Backup power supply
   - Emergency call button
   - EV charging
8. Environmental sensors
9. Wi-Fi access points



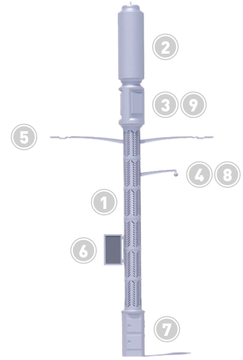
2 CommStreet 2

Best for: Locations where wireless coverage is required for 1 or 2 operators and additional services are needed

Height: Up to 11.5 meters (38 feet)

Features and options

1. Up to 8 radios supporting two providers with separate and secure cabinets
2. Small cell or 4G antennas
3. 5G and mmWave radios
4. Security camera
5. LED smart lighting
6. LED display
7. Control and power:
   - Pole and IoT communications hub
   - Radio communications support
   - Backup power supply
   - Emergency call button
   - EV charging
8. Environmental sensors
9. Wi-Fi access points



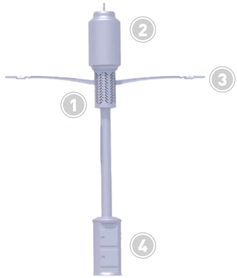
3 SoulStreet

Best For: Locations where 4G and small cells are required with the opportunity to expand for 5G

Height: Up to 7 meters (23 feet)

Features and options

1. Up to 4 radios supporting one provider
2. Small cell and 4G antennas
3. LED smart lighting
4. Control and power:
   - Pole and IoT communications hub
   - Radio communications support
   - Backup power supply
   - Emergency call button



4 NanoStreet

Best for: Locations where 5G and/or mmWave is required

Height: Up to 6 meters (20 feet)

Features and options

1. 5G and mmWave radios
2. Control and power:
   - Radio and IoT communications hub
   - Backup power supply
   - Emergency call button

Learn more about RFS Urban Based Infrastructure Solutions.

Designed to make your life easier

We've designed our Urban Based Infrastructure solutions to resolve key deployment and operational challenges:

- Robust, modular construction simplifies deployments and extends lifespan
- Futureproof design protects investments
- Value-added services simplify and accelerate installation, maintenance and commissioning
- Integrated lighting and wireless coverage streamline city infrastructure requirements
- Application-ready infrastructure accelerates time-to-revenue

Learn more about RFS Urban Based Infrastructure Solutions.

Radio Frequency Systems

RFS design and manufacture end-to-end RF solutions for wireless and broadcast networks. Our solutions are engineered from the ground-up to resolve your toughest RF challenges for 5G and beyond — whether you network is underground, over ground or indoors. They are renowned in the industry for their high quality, superior performance and innovation.