

# Bell

Small Cell Technology

## Responding to existing demand, and planning for future increase:

- Existing wireless networks are over capacity due to data demand. Demand is exponentially increasing.
- Rolling out network improvements in built-up areas that are sensitive to local context.
- Provide businesses, consumers and government staff with improved mobile connectivity.





In Canada, mobile data traffic will grow 700% from 2014 to 2019, a compound annual growth rate of 46%.

## What is Small Cell Technology?

Small cells are low-powered radios (max. output 10W) with a range of coverage and capacity of 100 – 200m.

Small cell sites are a tool to augment coverage and capacity.

Small cells are designed to be mounted on existing infrastructure.



## Small Cell Design – Antenna Specifications

### Power consumption

120/240V (AC), 220W max. per unit

(dual frequency mode)

### Weight

13 Kg (28.7 lbs) per unit.

### Dimensions

(HxWxD) 300 mm x 290 mm x 166 mm per unit

### Radio-frequency Health and Safety

Proposed installation in communication space of joint use poles or near top of light standards results in exposure limits far below Health Canada requirements for the general public.



Huawei BTS3911

## Pico Cell Design – Antenna Specifications

### Power consumption

120/240V (AC), 220W max. per unit

### Weight

2.2 Kg (4.85 lbs) per unit.

### Dimensions

Approximately 30 cm wide and 6 cm in height  
(depth)

### Radio-frequency Health and Safety

Proposed installation in communication space of joint use poles or near top of light standards results in exposure limits far below Health Canada requirements for the general public.



Nokia PicoCell

## Typical Layout of Equipment

Bell Mobilyi strives to maintain a consistant minimalistic approach to the installation of wireless technologies nationally.

This is a preferred typical example of an installation on a utility or telephone pole.

Power Connection

Fibre Optic Connection

Radio Mount  
Fibre/GFI

Antenna(s)

Breaker

Ground



Before



After





Before



After



Before



After



# Next Steps

Bell is dedicated to maintaining and growing its best in class communications networks in support of Fort Erie's expansion and development as well as moving forward in order to:

- Work with staff and council to scope areas for consideration in project trial roll-out.
- Integrate Small Cell and Fibre infrastructure to support the growing coverage and capacity requirements, utilizing the Region's existing infrastructure.
- Trial small cell locations.
- Master Municipal License Agreement

