CLEARFIELD

Fiber to Anywhere.

Wireless:
Product Application Examples

Note: these are examples of deployment applications. Clearfield offers multiple deployment methods that can be tailored to your specific network needs.
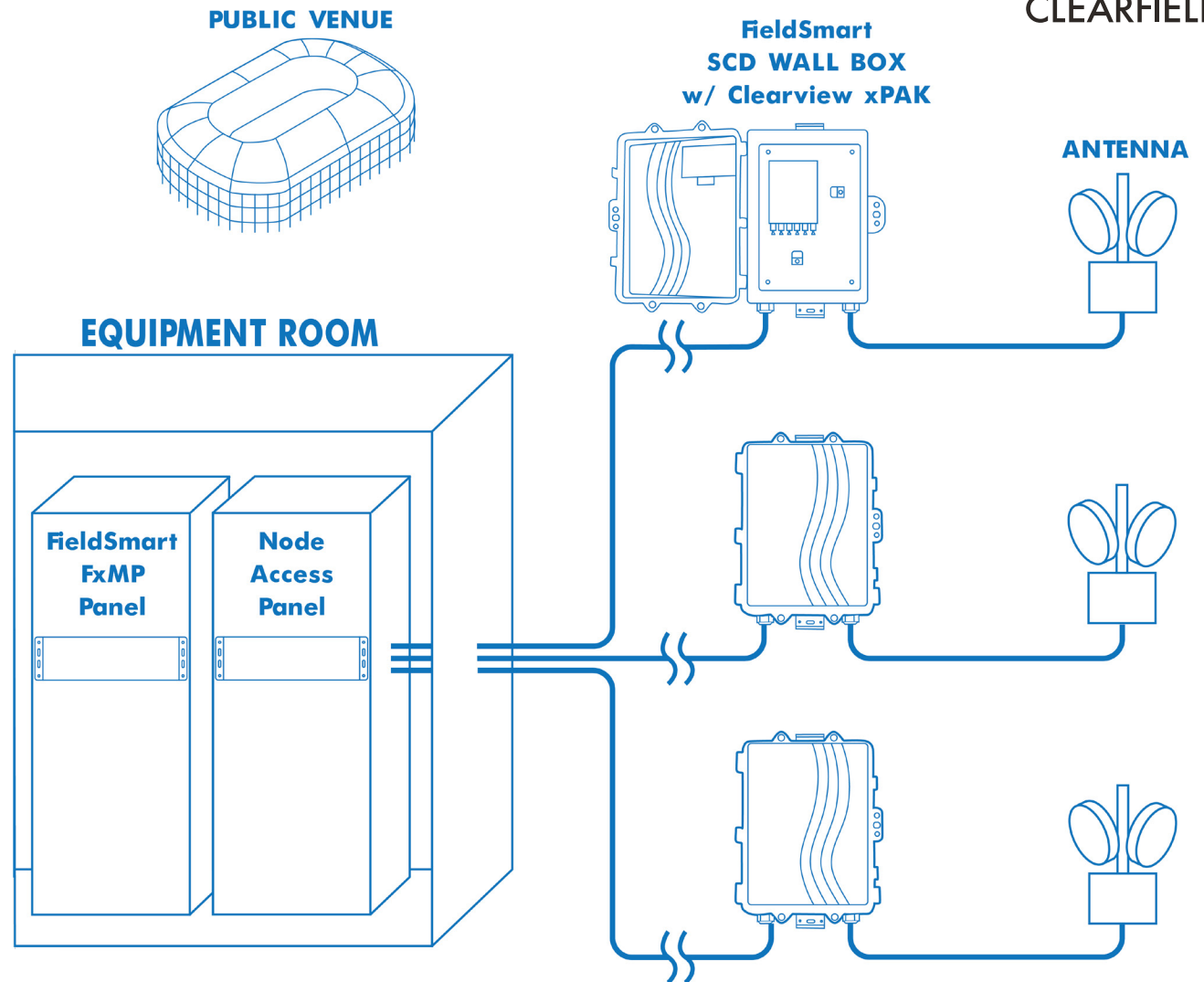
Deployment Scenario:
- Multiple Antenna location around venue
- Common communications room
- Antenna is locally powered

Challenges:
- Antenna are spread over a large area and in different buildings
- Antenna fibers need to be consolidated and managed easily
- Fibers to the antenna must pass through multiple environments (OSP/ISP)

Solution:
- FieldShield® fiber with pushable connector passing through microduct to feed each antenna location
- Each antenna is fed with FieldShield pushable fiber or FieldShield FLEXdrop terminated with a pushable SC connector
- Tooless to antenna hand-off (craft friendly)
- Antenna fibers can then be managed from single location

PUBLIC VENUE

FieldSmart SCD WALL BOX w/ Clearview xPAK

ANTENNA

EQUIPMENT ROOM

FieldSmart FxMP Panel

Node Access Panel

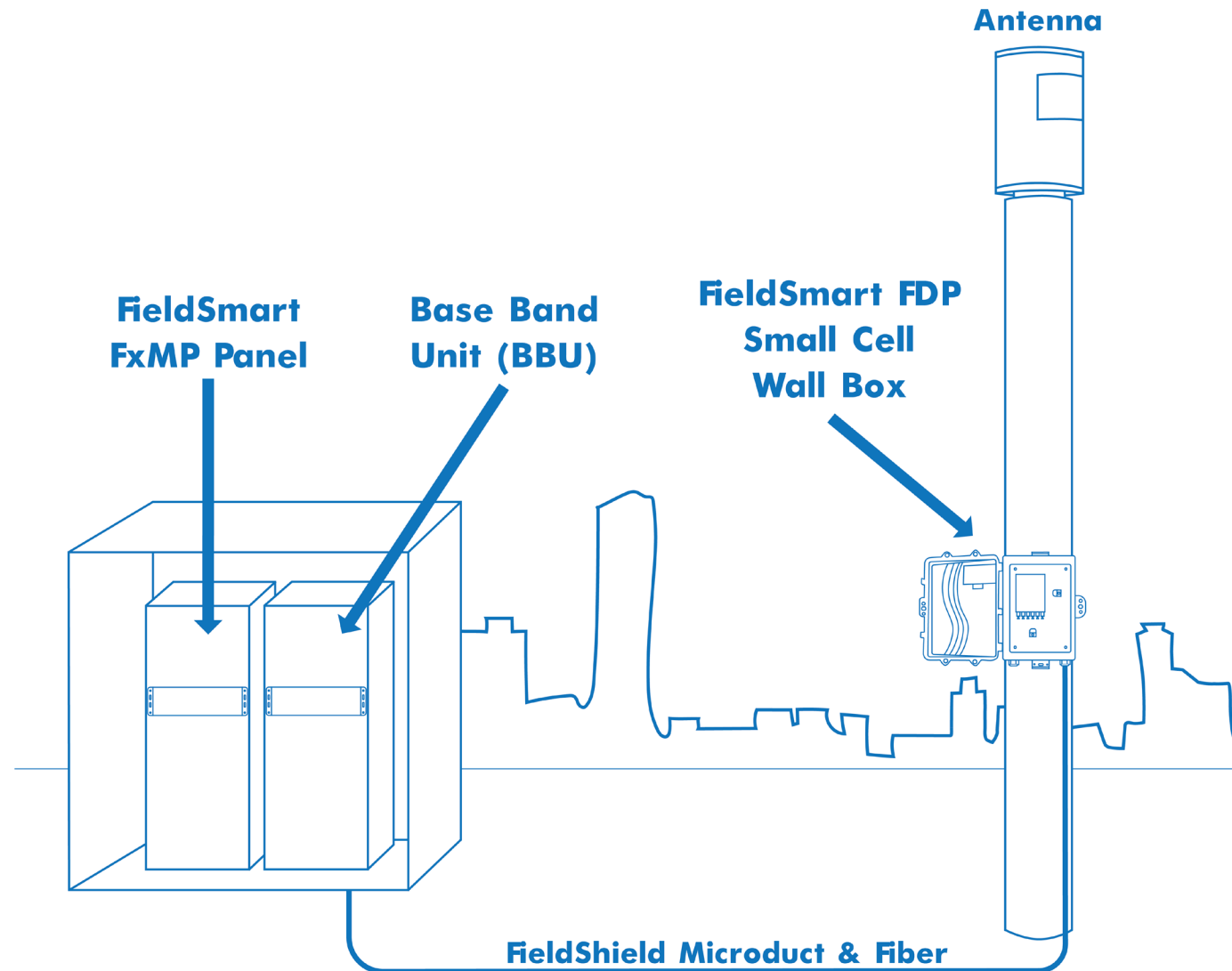**CLEARFIELD**

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Deployment Scenario:
- Multiple Small Cell locations served by common BBU (base band unit)
- Individual Small Cell serves small area
- Small Cells are dispersed over a larger area
- Antenna is locally powered

Challenges:
- Antenna are spread over a large area and in various configurations (OSP/ISP)
- Small Cell feed fibers need to be consolidated and managed easily
- Fibers need to be well protected and easily installed
- Fibers to the Small Cell need to be replaceable or able to be upgraded

Solution:
- FieldShield fiber with pushable connector passing through microduct to feed each Small Cell Handoff location
- Each Small Cell is fed with a FieldShield pushable fiber assembly, terminated with a pushable SC connector and deployed to a SCD Box with xPAK
- Connection to Small Cell hand-off requires no tools
- Small Cell fibers can then be managed from single location.
- Changes to configuration are easily accomplished from central point

Antenna

FieldSmart FxMP Panel

Base Band Unit (BBU)

FieldSmart FDP Small Cell Wall Box

FieldShield Microduct & Fiber

WIRELESS - CRAN

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Deployment Scenario:
- Multiple wireless locations need fiber to serve bandwidth needs
- Each tower location fiber link requires testing capability without service interruption
- Each location is fed via fiber from its BBU (Base Band Unit)
- Transitioning fibers from the network need to be managed for easy connection and distribution to individual site

Challenges:
- Normal testing requires service interruption
- Typical equipment room footprints are small
- Fibers need to be well protected and easily managed
- Proper testing requires equal distribution of signal between service ports and test ports

Solution:
- A FieldSmart® FxMP panel manages the network fibers and distributes them to the BBU
- Fibers from BBU are passed through a FieldSmart C-RAN/CIPRI test panel that allows for testing without service interruption
- Fibers from the test panel are routed through a FieldSmart Tower Access Panel and on to the various RRU's (Remote Radio Head)
- All fibers are managed and protected
- Changes to configuration are easily accomplished from central point

Cloud **R**adio **A**ccess **N**etwork

Remote Radio Unit (RRU)

Passive Antenna

Fiber Optic Cable

CPRI Test Panel

FieldSmart Tower Access Panel

FieldSmart FxMP PANEL

Base Band Unit (BBU)

NETWORK