

July 23, 2014

Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification
15 Dwight Street, North Haven, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains twelve (12) antennas at the 108-foot level of the existing 150-foot tower at 15 Dwight Street in North Haven, Connecticut (the Property”). The tower is owned by American Tower Corporation. The Council approved Cellco’s use of this tower in 1999. Cellco now intends to modify its facility by removing all of its existing antennas and replacing them with three (3) model LNX-6514DS-VTM, 850 MHz antennas; three (3) BXA-70063-6CF, 700 MHz antennas; three (3) model HBX-6516DS-VTM, 1900 MHz antennas; and three (3) model HBX-6517DS-VTM, 2100 MHz antennas, all at the 108-foot level on the tower. Cellco also intends to install three (3) remote radio heads (“RRHs”) behind its 2100 MHz antennas and one (1) HYBRIFLEX™ antenna cable. Included in Attachment 1 are specifications for Cellco’s replacement antennas, RRHs and HYBRIFLEX™ cable.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Michael J. Freda, First Selectman of the Town of North Haven. A copy of this letter is also being sent to 15 Dwight Street LLC Corporation, the owner of the Property.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

13044990-v1

Robinson+Cole

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1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's new antennas and RRHs will be installed at the 108-foot level on the existing 150-foot tower.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included in Attachment 2.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The tower and its foundation can support Cellco's proposed modifications. (See Structural Evaluation Letter included in Attachment 3).

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Michael J. Freda, North Haven First Selectman
15 Dwight Street LLC
Sandy M. Carter

ATTACHMENT 1

Product Specifications

COMMSCOPE®

LNX-6514DS-VTM

Andrew® Antenna, 698–896 MHz, 65° horizontal beamwidth, RET compatible

POWERED BY



Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 |
|--|------------|------------|
| Gain, dBi | 15.7 | 16.3 |
| Beamwidth, Horizontal, degrees | 65 | 65 |
| Beamwidth, Horizontal Tolerance, degrees | ±3 | ±3 |
| Beamwidth, Vertical, degrees | 12.5 | 11.2 |
| Beam Tilt, degrees | 0–10 | 0–10 |
| USLS, typical, dB | 17 | 18 |
| Front-to-Back Ratio at 180°, dB | 32 | 30 |
| CPR at Boresight, dB | 20 | 20 |
| CPR at Sector, dB | 10 | 10 |
| Isolation, dB | 30 | 30 |
| VSWR Return Loss, dB | 1.4 15.6 | 1.4 15.6 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 |
| Input Power per Port, maximum, watts | 400 | 400 |
| Polarization | ±45° | ±45° |

Mechanical Specifications

| | |
|---|--|
| Color Radome Material | Light gray Fiberglass, UV resistant |
| Connector Interface Location Quantity | 7-16 DIN Female Bottom 2 |
| Wind Loading, maximum | 617.7 N @ 150 km/h 138.9 lbf @ 150 km/h |
| Wind Speed, maximum | 241.0 km/h 149.8 mph |
| Antenna Dimensions, L x W x D | 1847.0 mm x 301.0 mm x 181.0 mm 72.7 in x 11.9 in x 7.1 in |
| Net Weight | 17.6 kg 38.8 lb |

Model with factory installed AISG 2.0 RET LNX-6514DS-A1M



BXA-70063-6CF-EDIN-X

X-Pol | FET Panel | 63° | 14.5 dBd

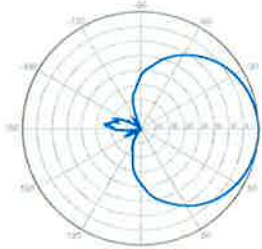
Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.



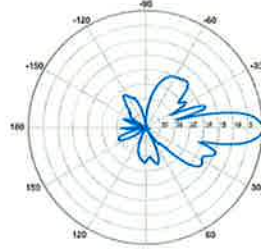
| Electrical Characteristics | 696-900 MHz | | |
|---|---|--|-----------------|
| Frequency bands | 696-806 MHz | 806-900 MHz | |
| Polarization | ±45° | | |
| Horizontal beamwidth | 65° | 63° | |
| Vertical beamwidth | 13° | 11° | |
| Gain | 14.0 dBd (16.1 dBi) | 14.5 dBd (16.6 dBi) | |
| Electrical downtilt (X) | 0, 2, 3, 4, 5, 6, 8, 10 | | |
| Impedance | 50Ω | | |
| VSWR | ≤1.35:1 | | |
| Upper sidelobe suppression (0°) | -18.3 dB | -18.2 dB | |
| Front-to-back ratio (+/-30°) | -33.4 dB | -36.3 dB | |
| Null fill | 5% (-26.02 dB) | | |
| Isolation between ports | < -25 dB | | |
| Input power with EDIN connectors | 500 W | | |
| Input power with NE connectors | 300 W | | |
| IM3 (2x20W carriers) | < -153 dBc | | |
| Lightning protection | Direct Ground | | |
| Connector(s) | 2 Ports / EDIN or NE / Female / Center (Back) | | |
| Mechanical Characteristics | | | |
| Dimensions Length x Width x Depth | 1804 x 285 x 132 mm | 71.0 x 11.2 x 5.2 in | |
| Depth with z-brackets | 172 mm | 6.8 in | |
| Weight without mounting brackets | 7.9 kg | 17 lbs | |
| Survival wind speed | > 201 km/hr > 125 mph | | |
| Wind area | Front: 0.51 m ² Side: 0.24 m ² | Front: 5.5 ft ² Side: 2.6 ft ² | |
| Wind load @ 161 km/hr (100 mph) | Front: 759 N Side: 391 N | Front: 169 lbf Side: 89 lbf | |
| Mounting Options | Part Number | Fits Pipe Diameter | Weight |
| 3-Point Mounting & Downtilt Bracket Kit | 36210008 | 40-115 mm 1.57-4.5 in | 6.9 kg 15.2 lbs |
| Concealment Configurations | For concealment configurations, order BXA-70063-6CF-EDIN-X-FP | | |

BXA-70063-6CF-EDIN-X



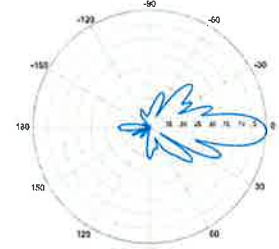
Horizontal | 750 MHz

BXA-70063-6CF-EDIN-0

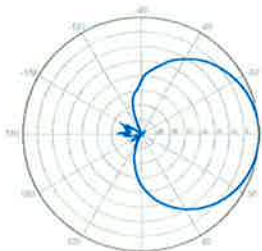


0° | Vertical | 750 MHz

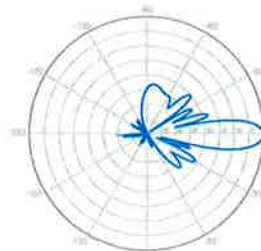
BXA-70063-6CF-EDIN-2



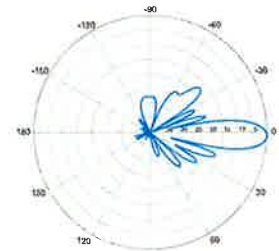
2° | Vertical | 750 MHz



Horizontal | 850 MHz



0° | Vertical | 850 MHz



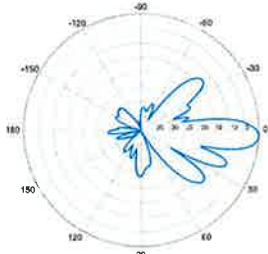
2° | Vertical | 850 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

BXA-70063-6CF-EDIN-X

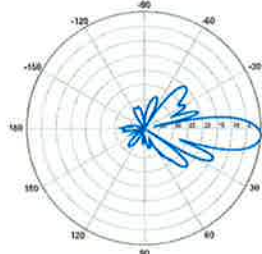
X-Pol | FET Panel | 63° | 14.5 dBd

BXA-70063-6CF-EDIN-3



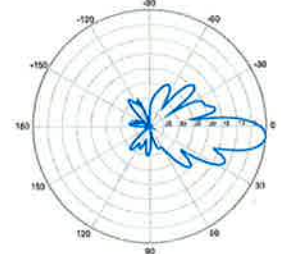
3° | Vertical | 750 MHz

BXA-70063-6CF-EDIN-4

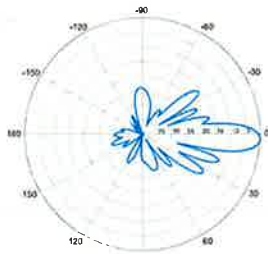


4° | Vertical | 750 MHz

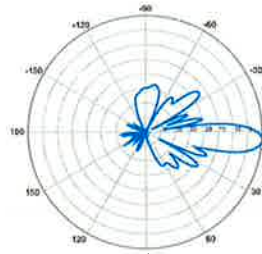
BXA-70063-6CF-EDIN-5



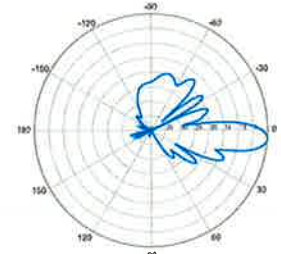
5° | Vertical | 750 MHz



3° | Vertical | 850 MHz

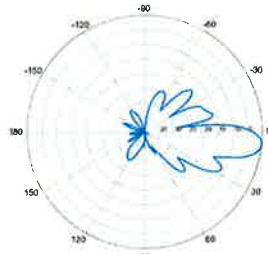


4° | Vertical | 850 MHz



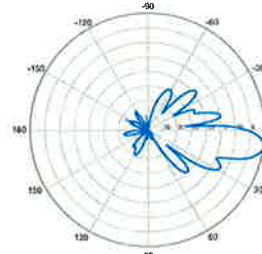
5° | Vertical | 850 MHz

BXA-70063-6CF-EDIN-6



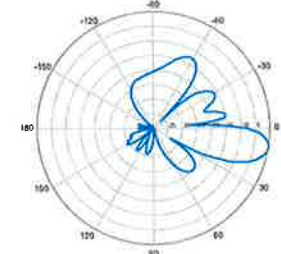
6° | Vertical | 750 MHz

BXA-70063-6CF-EDIN-8

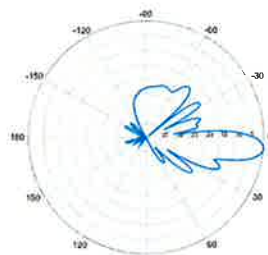


8° | Vertical | 750 MHz

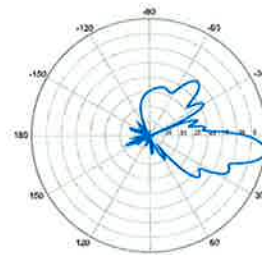
BXA-70063-6CF-EDIN-10



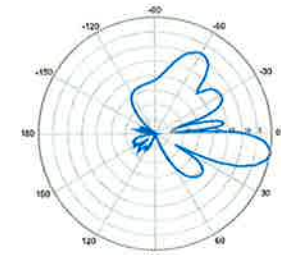
10° | Vertical | 750 MHz



6° | Vertical | 850 MHz



8° | Vertical | 850 MHz



10° | Vertical | 850 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

Product Specifications

COMMSCOPE®

HBX-6516DS-VTM

Andrew® Teletilt® Antenna, 1710–2170 MHz, 65° horizontal beamwidth, RET compatible



Electrical Specifications

| Frequency Band, MHz | 1710–1880 | 1850–1990 | 1920–2170 |
|---|------------|------------|------------|
| Gain by all Beam Tilts, average, dBi | 17.1 | 17.3 | 17.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.2 | ±0.3 | ±0.4 |
| | 0° 17.1 | 0° 17.3 | 0° 17.6 |
| Gain by Beam Tilt, average, dBi | 5° 17.2 | 5° 17.5 | 5° 17.7 |
| | 10° 16.9 | 10° 17.0 | 10° 17.1 |
| Beamwidth, Horizontal, degrees | 68 | 65 | 64 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.9 | ±1.6 | ±2.1 |
| Beamwidth, Vertical, degrees | 7.5 | 7.0 | 6.7 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.3 | ±0.4 |
| Beam Tilt, degrees | 0–10 | 0–10 | 0–10 |
| USLS, dB | 19 | 19 | 19 |
| Front-to-Back Total Power at 180° ± 30°, dB | 25 | 26 | 26 |
| CPR at Boresight, dB | 22 | 22 | 22 |
| CPR at Sector, dB | 11 | 9 | 9 |
| Isolation, dB | 30 | 30 | 30 |
| VSWR Return Loss, dB | 1.4 15.6 | 1.4 15.6 | 1.4 15.6 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 350 | 350 | 350 |
| Polarization | ±45° | ±45° | ±45° |

*Values calculated using NGMN Alliance N-P-BASTA v9.6

Mechanical Specifications

| | |
|---|--|
| Color Radome Material | Light gray PVC, UV resistant |
| Connector Interface Location Quantity | 7-16 DIN Female Bottom 2 |
| Wind Loading, maximum | 257.0 N @ 150 km/h 57.8 lbf @ 150 km/h |
| Wind Speed, maximum | 241.0 km/h 149.8 mph |
| Antenna Dimensions, L x W x D | 1306.0 mm x 166.0 mm x 83.0 mm 51.4 in x 6.5 in x 3.3 in |
| Net Weight | 4.7 kg 10.4 lb |
| Model with factory installed AISG 2.0 RET | HBX-6516DS-A1M |



Product Specifications

COMMSCOPE®

POWERED BY



HBX-6517DS-VTM

Andrew® Teletilt® Antenna, 1710–2180 MHz, 65° horizontal beamwidth, RET compatible

- Superior azimuth tracking and pattern symmetry to minimize any sector overlap
- Rugged, reliable design with excellent passive intermodulation suppression
- The values presented on this datasheet have been calculated based on N-P-BASTA White Paper version 9.6 by the NGMN Alliance

Electrical Specifications

| Frequency Band, MHz | 1710–1880 | 1850–1990 | 1920–2180 |
|---|------------|------------|------------|
| Gain by all Beam Tilts, average, dBi | 18.5 | 18.6 | 18.9 |
| Gain by all Beam Tilts Tolerance, dB | ±0.2 | ±0.3 | ±0.4 |
| | 0 ° 18.3 | 0 ° 18.4 | 0 ° 18.8 |
| Gain by Beam Tilt, average, dBi | 3 ° 18.6 | 3 ° 18.7 | 3 ° 19.1 |
| | 6 ° 18.4 | 6 ° 18.6 | 6 ° 18.7 |
| Beamwidth, Horizontal, degrees | 67 | 66 | 64 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.8 | ±0.9 | ±2.8 |
| Beamwidth, Vertical, degrees | 5.0 | 4.7 | 4.4 |
| Beamwidth, Vertical Tolerance, degrees | ±0.2 | ±0.2 | ±0.3 |
| Beam Tilt, degrees | 0–6 | 0–6 | 0–6 |
| USLS, dB | 19 | 19 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 | 26 | 26 |
| CPR at Boresight, dB | 22 | 22 | 22 |
| CPR at Sector, dB | 11 | 11 | 9 |
| Isolation, dB | 30 | 30 | 30 |
| VSWR Return Loss, dB | 1.4 15.6 | 1.4 15.6 | 1.4 15.6 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 350 | 350 | 350 |
| Polarization | ±45° | ±45° | ±45° |
| Impedance | 50 ohm | 50 ohm | 50 ohm |

General Specifications

| | |
|----------------------------|----------------------|
| Antenna Brand | Andrew® |
| Antenna Type | DualPol® |
| Band | Single band |
| Brand | DualPol® Teletilt® |
| Operating Frequency Band | 1710 – 2180 MHz |
| Number of Ports, all types | 2 |

Mechanical Specifications

| | |
|------------------------|------------------------|
| Color | Light gray |
| Lightning Protection | dc Ground |
| Radiator Material | Low loss circuit board |
| Radome Material | PVC, UV resistant |
| RF Connector Interface | 7-16 DIN Female |
| RF Connector Location | Bottom |

Product Specifications

COMMSCOPE®

HBX-6517DS-VTM



| | |
|------------------------------|---|
| RF Connector Quantity, total | 2 |
| Wind Loading, maximum | 393.0 N @ 150 km/h 88.3 lbf @ 150 km/h |
| Wind Speed, maximum | 241.0 km/h 149.8 mph |

Dimensions

| | |
|------------|---------------------|
| Depth | 83.0 mm 3.3 in |
| Length | 1902.0 mm 74.9 in |
| Width | 166.0 mm 6.5 in |
| Net Weight | 6.2 kg 13.7 lb |

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 1.1 Actuator HBX-6517DS-R2M

Model with Factory Installed AISG 2.0 Actuator HBX-6517DS-A1M

RET System Teletilt®

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU

China RoHS SJ/T 11364-2006

ISO 9001:2008

Classification

Compliant by Exemption

Above Maximum Concentration Value (MCV)

Designed, manufactured and/or distributed under this quality management system



Included Products

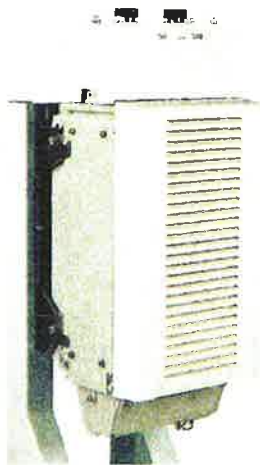
DB390 — Pipe Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Use for narrow panel antennas. Includes two pipe mounts.

DB5098E — Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

Alcatel-Lucent RRH2x40-AWS

REMOTE RADIO HEAD

The Alcatel-Lucent RRH2x40-AWS is a high-power, small form-factor Remote Radio Head (RRH) operating in the AWS frequency band (1700/2100MHz - 3GPP Band 4). The Alcatel-Lucent RRH2x40-AWS is designed with an eco-efficient approach, providing operators with the means to achieve high quality and capacity coverage with minimum site requirements.



A distributed eNodeB expands deployment options by using two components, a Base Band Unit (BBU) containing the digital assets and a separate RRH containing the radio-frequency (RF) elements. This modular design optimizes available space and allows the main components of an eNodeB to be installed separately, within the same site or several kilometres apart.

The Alcatel-Lucent RRH2x40-AWS is linked to the BBU by an optical-fiber connection carrying downlink and uplink digital radio signals along with operations, administration and maintenance (OA&M) information. The Alcatel-Lucent RRH2x40-AWS has two transmit RF paths, 40 W RF output power per transmit path, and is designed to manage up to four-way receive diversity. The device is ideally suited to support macro coverage, with multiple-input multiple-output (MIMO) 2x2 operation in up to 20 MHz of bandwidth.

The Alcatel-Lucent RRH2x40-AWS is designed to make available all the benefits of a distributed eNodeB, with excellent RF characteristics, with low

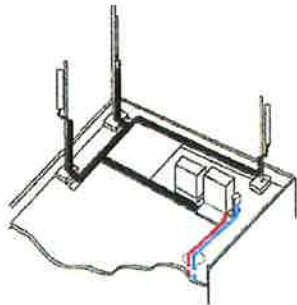
capital expenditures (CAPEX) and low operating expenditures (OPEX). The limited space available in some sites may prevent the installation of traditional single-cabinet BTS equipment or require costly cranes to be employed, leaving coverage holes. However, many of these sites can host an Alcatel-Lucent RRH2x40-AWS installation, providing more flexible site selection and improved network quality along with greatly reduced installation time and costs.

Fast, low-cost installation and deployment

The Alcatel-Lucent RRH2x40-AWS is a zero-footprint solution and operates noise-free, simplifying negotiations with site property owners and minimizing environmental impacts. Installation can easily be done by a single person because the Alcatel-Lucent RRH2x40-AWS is compact and weighs less than 20 kg (44 lb), eliminating the need for a crane to hoist the BTS cabinet to the rooftop. A site can be in operation in less than one day — a fraction of the time required for a traditional BTS.

Excellent RF performance

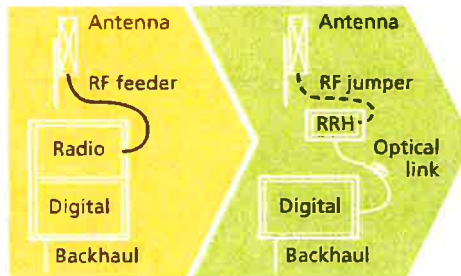
Because of its small size and weight, the Alcatel-Lucent RRH2x40-AWS can be installed close to the antenna. Operators can therefore locate the Alcatel-Lucent RRH2x40-AWS where RF engineering is deemed ideal, minimizing trade-offs between available sites and RF optimum sites. The RF feeder cost and installation costs are reduced or eliminated, and there is no need for a Tower Mounted Amplifier (TMA) because losses introduced by the RF feeder are greatly reduced. The Alcatel-Lucent RRH2x40-AWS provides more RF power while at the same time consuming less electricity.



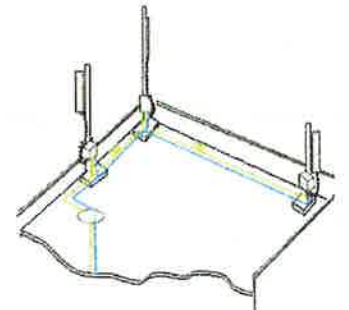
Macro

Features

- Zero-footprint deployment
- Easy installation, with a lightweight unit can be carried and set up by one person
- Optimized RF power, with flexible site selection and elimination of a TMA
- Convection-cooled (fanless)
- Noise-free
- Best-in-class power efficiency, with significantly reduced energy consumption



RRH for space-constrained cell sites



Distributed

Benefits

- Leverages existing real estate with lower site costs
- Reduces installation costs, with fewer installation materials and simplified logistics
- Decreases power costs and minimizes environmental impacts, with the potential for eco-sustainable power options
- Improves RF performance and adds flexibility to network planning

Technical specifications

Physical dimensions

- Height: 620 mm (24.4 in.)
- Width: 270 mm (10.63 in.)
- Depth: 170mm (6.7 in.)
- Weight (without mounting kit): less than 20 kg (44 lb)

Power

- Power supply: -48VDC

Operating environment

- Outdoor temperature range:
 - With solar load: -40°C to +50°C (-40°F to +122°F)
 - Without solar load: -40°C to +55°C (-40°F to +131°F)

- Passive convection cooling (no fans)
- Enclosure protection
 - IP65 (International Protection rating)

RF characteristics

- Frequency band: 1700/2100 MHz (AWS); 3GPP Band 4
- Bandwidth: up to 20 MHz
- RF output power at antenna port: 40 W nominal RF power for each Tx port
- Rx diversity: 2-way or 4-way with optional Rx Diversity module
- Noise figure: below 2.0 dB typical
- Antenna Line Device features
 - TMA and Remote electrical tilt (RET) support via AISG v2.0

Optical characteristics

Type/number of fibers

- Single-mode variant
 - One Single Mode Single Fiber per RRH2x, carrying UL and DL using CWDM
 - Single mode dual fiber (SM/DF)
- Multi-mode variant
 - Two Multi-mode fibers per RRH2x: one carrying UL, the other carrying DL

Optical fiber length

- Up to 500 m (0.31 mi), using MM fiber
- Up to 20 km (12.43 mi), using SM fiber

Digital Ports and Alarms

- Two optical ports to support daisy-chaining
- Six external alarms



HYBRIFLEX™ RRH Hybrid Feeder Cabling Solution, 1-5/8", Single-Mode Fiber

Product Description

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines optical fiber and DC power for RRHs in a single lightweight aluminum corrugated cable, making it the world's most innovative solution for RRH deployments.

It was developed to reduce installation complexity and costs at Cellular sites. HYBRIFLEX allows mobile operators deploying an RRH architecture to standardize the RRH installation process and eliminate the need for and cost of cable grounding. HYBRIFLEX combines optical fiber (multi-mode or single-mode) and power in a single corrugated cable. It eliminates the need for junction boxes and can connect multiple RRHs with a single feeder. Standard RFS CELLFLEX® accessories can be used with HYBRIFLEX cable. Both pre-connectorized and on-site options are available.

Features/Benefits

- Aluminum corrugated armor with outstanding bending characteristics - minimizes installation time and enables mechanical protection and shielding
- Same accessories as 1 5/8" coaxial cable
- Outer conductor grounding - Eliminates typical grounding requirements and saves on installation costs
- Lightweight solution and compact design - Decreases tower loading
- Robust cabling - Eliminates need for expensive cable trays and ducts
- Installation of tight bundled fiber optic cable pairs directly to the RRH - Reduces CAPEX and wind load by eliminating need for interconnection
- Optical fiber and power cables housed in single corrugated cable - Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- Outdoor polyethylene jacket - Ensures long-lasting cable protection



Figure 1: HYBRIFLEX Series

Technical Specifications

| | | | |
|-----------------------|--------------------------------|------------|-------------|
| STRUCTURE | | | |
| Outer Conductor Armor | Corrugated Aluminum | [mm (in.)] | 46.5 (1.83) |
| Jacket | Polyethylene, PE | [mm (in.)] | 50.3 (1.98) |
| UV-Protection | Individual and External Jacket | | Yes |

| | | | |
|--|--|-----------------|------------------------|
| Mechanical Properties | | | |
| Weight, Approximate | | [kg/m (lb/ft.)] | 1.9 (1.30) |
| Minimum Bending Radius, Single Bending | | [mm (in.)] | 200 (8) |
| Minimum Bending Radius, Repeated Bending | | [mm (in.)] | 500 (20) |
| Recommended/Maximum Clamp Spacing | | [m (ft.)] | 1.0 / 1.2 (3.25 / 4.0) |

| | | | |
|--|--|--------------------|--------------|
| Electrical Properties | | | |
| DC-Resistance Outer Conductor Armor | | [Ω/km (Ω/1000ft.)] | 0.68 (0.205) |
| DC-Resistance Power Cable, 8.4mm ² (8AWG) | | [Ω/km (Ω/1000ft.)] | 2.1 (0.307) |

| | | | |
|---------------------------------------|------------|---------|-----------------------------------|
| Optical Properties | | | |
| Version | | | Single-mode OM3 |
| Quantity, Fiber Count | | | 16 (8 pairs) |
| Core/Clad | [μm] | | 50/125 |
| Primary Coating (Acrylate) | [μm] | | 245 |
| Buffer Diameter, Nominal | [μm] | | 900 |
| Secondary Protection, Jacket, Nominal | [mm (in.)] | | 2.0 (0.08) |
| Minimum Bending Radius | [mm (in.)] | | 104 (4.1) |
| Insertion Loss @ wavelength 850nm | | [dB/km] | 3.0 |
| Insertion Loss @ wavelength 1310nm | | [dB/km] | 1.0 |
| Standards (Meets or exceeds) | | | UL34-V0, UL1666 RoHS Compliant |

| | | | |
|----------------------------------|------------|--|---|
| DC Power Cable Properties | | | |
| Size (Power) | [mm (AWG)] | | 8.4 (8) |
| Quantity, Wire Count (Power) | | | 16 (8 pairs) |
| Size (Alarm) | [mm (AWG)] | | 0.8 (18) |
| Quantity, Wire Count (Alarm) | | | 4 (2 pairs) |
| Type | | | UV protected |
| Strands | | | 19 |
| Primary Jacket Diameter, Nominal | [mm (in.)] | | 6.8 (0.27) |
| Standards (Meets or exceeds) | | | NFPA 130, ICEA S-95-638 UL Type XHHW-2, UL 44 UL-L5 Limited Smoke, UL VW-1 IEEE-383 (1974), IEEE1202/FT4 RoHS Compliant |

| | | | |
|-----------------------------|-----------|--|-------------------------|
| Operating Conditions | | | |
| Installation Temperature | [°C (°F)] | | -40 to +65 (-40 to 149) |
| Operation Temperature | [°C (°F)] | | -40 to +65 (-40 to 149) |

* This data is provisional and subject to change

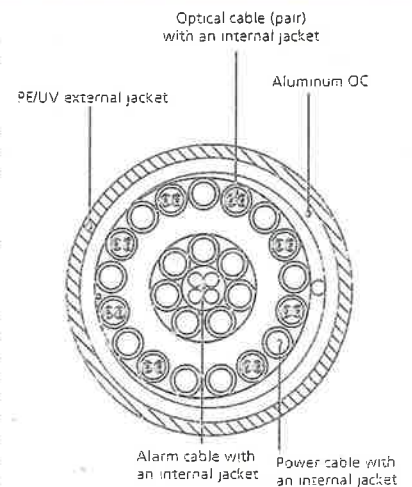


Figure 3: Construction Detail

All information contained in the present datasheet is subject to confirmation at time of ordering

ATTACHMENT 2

| | General | Power | Density | | | | | | |
|------------|------------|-----------|---------|------------------|--------|--------------------|--------------|-------|-------|
| CARRIER | # OF CHAN. | WATTS ERP | HEIGHT | CALC. POWER DENS | FREQ. | MAX. PERMISS. EXP. | FRACTION MPE | Total | |
| *AT&T UMTS | 2 | 565 | 151 | 0.0178 | 880 | 0.5867 | 3.04% | | |
| *AT&T UMTS | 2 | 875 | 151 | 0.0276 | 1900 | 1.0000 | 2.76% | | |
| *AT&T GSM | 1 | 283 | 151 | 0.0045 | 880 | 0.5867 | 0.76% | | |
| *AT&T GSM | 4 | 525 | 151 | 0.0331 | 1900 | 1.0000 | 3.31% | | |
| *AT&T LTE | 1 | 1313 | 151 | 0.0207 | 734 | 0.4893 | 4.23% | | |
| *Clearwire | 2 | 153 | 146 | 0.0052 | 2496 | 1.0000 | 0.52% | | |
| *Clearwire | 1 | 211 | 146 | 0.0036 | 11 GHz | 1.0000 | 0.36% | | |
| Verizon | 7 | 333 | 108 | 0.0719 | 1970 | 1.0000 | 7.19% | | |
| Verizon | 9 | 360 | 108 | 0.0999 | 869 | 0.5793 | 17.24% | | |
| Verizon | 1 | 1918 | 108 | 0.0591 | 2145 | 1.0000 | 5.91% | | |
| Verizon | 1 | 814 | 108 | 0.0251 | 698 | 0.4973 | 5.05% | | |
| | | | | | | | | | 50.4% |
| | | | | | | | | | |
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* Source: Siting Council

ATTACHMENT 3



| Structural Evaluation | |
|------------------------------|---|
| ATC Site Number & Name | 302482, North Haven CT 1, CT |
| Carrier Site Number & Name | N/A , North Haven 2 |
| Site Location | 15 Dewight Street North Haven, CT 06473-1198, New Haven County 41.420806 N / -72.848800 W |
| Tower Description | 150 ft Monopole |
| Basic Wind Speed | 110 mph (3-Second Gust) |
| Basic Wind Speed w/ Ice Code | 50 mph (3-Second Gust) w/ 3/4 " ice ANSI/TIA-222-G / 2003 IBC w/ 2005 Connecticut Supplement and 2009 and 2011 Connecticut Amendment |

Existing and Reserved Equipment

| Mount Elev. ¹ (ft) | Qty. | Antenna | Mount Type | Lines | Carrier |
|-------------------------------|----------------------------|----------------------------|----------------------|---|------------------|
| 153.0 | 6 | LGP Allgon LGP21903 | Low Profile Platform | (12) 1 1/4" Coax (2) 0.78" 8 AWG 6 (1) 0.39" Cable | AT&T Mobility |
| | 6 | Powerwave LGP21401 | | | |
| | 1 | Raycap DC6-48-60-18-8F | | | |
| | 6 | Ericsson RRUS 11 (Band 12) | | | |
| | 6 | Powerwave 7770.00 | | | |
| | 3 | KMW AM-X-CD-16-65-00T-RET | | | |
| 146.0 | 3 | DragonWave Horizon Compact | Stand-Off | (6) 5/16" (0.31") Coax (3) 1/2" Coax (2) 2" conduit | Clearwire |
| | 1 | 12" x 12" Junction Box | | | |
| | 1 | DragonWave A-ANT-23G-1-C | | | |
| | 3 | NextNet BTS-2500 | | | |
| | 1 | DragonWave A-ANT-11G-2-C | | | |
| | 3 | Argus LLPX310R | | | |
| 1 | DragonWave A-ANT-11G-2.5-C | | | | |
| 108.0 | 6 | RFS FD9R6004/1C-3L | Low Profile Platform | (12) 1 5/8" Coax | Verizon Wireless |



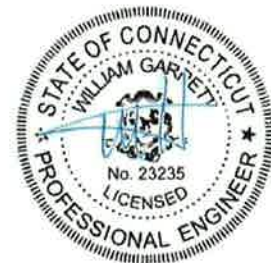
Proposed Equipment

| Elevation ¹ (ft) | | Qty. | Antenna | Mount Type | Lines | Carrier |
|-----------------------------|-------|------|---|----------------------|----------------------|------------------|
| Mount | RAD | | | | | |
| 108.0 | 108.0 | 3 | Alcatel-Lucent RRH2X40-AWS 1700/2100 MHZ | Low Profile Platform | (1) 1 5/8" Hybriflex | Verizon Wireless |
| | | 3 | Commscope HBX-6516DS-VTM | | | |
| | | 3 | Commscope HBX-6517DS-VTM | | | |
| | | 1 | RFS DB-T1-6Z-8AB-0Z | | | |
| | | 3 | Antel BXA-70063/6CF | | | |
| | | 3 | Commscope LNX-6514DS-VTM | | | |

¹Mount elevation is defined as height above bottom of steel structure to bottom of mount, RAD elevation is defined as center of antenna above grade level (AGL).

Install proposed coax inside of the pole shaft.

The existing and proposed loads listed in the tables above are compared to the tower's current design capacity or previous structural analysis. The tower should be re-evaluated as future loads are added or if actual loads are found different from those listed in the tables. The subject tower and foundation **are adequate** to support the above stated loads in conformance with specified requirements.



Mar 31 2014 9:18 AM

AT/KMV