



Artemis pWave Mini Enables Rapid 5G LTE and Fixed Wireless Deployment

Rapid, high-density 50x performance LTE deployment anywhere a cable can be deployed

Successful pCell outdoor and indoor trials in San Francisco

See live pCell demos at DISH Network booth LVCC Central Hall 11421

Las Vegas – January 5, 2017 – Artemis Networks™ today introduced the **pWave™ Mini**, the world’s smallest and highest performance LTE-compatible base stations, enabling rapid, permit-free, ultra-high-density 5G deployment. At just 15mm in width, **pWave Mini™** base stations can be daisy-chained into cables that look just like cable TV cables, enabling deployment anywhere a cable can be deployed—whether discreetly hidden on roof tops, along buildings, on streetlights, strung between utility poles or within homes, offices or stadiums, emitting no more power than a home Wi-Fi router.

Powered by **Artemis™ pCell™ Edge Software Defined Radio**, **pWave Minis** not only deliver 5G performance—over 50x conventional LTE spectral efficiency—on existing LTE devices such as iPhone®, Android®, iPad® and LTE routers, but **pWave Minis** are protocol-agnostic, supporting both today’s LTE, Wi-Fi and NLOS Fixed Wireless devices as well as future wireless technologies, such as IoT, 3D positioning and wireless power. With frequency agility supporting licensed and unlicensed spectrum, **pWave Minis** provide an unprecedented level of flexibility, performance and speed of deployment.

“**pCell** LTE technology is the largest performance leapfrog in wireless history, and now the **pWave Mini** enables rapid, easy, low-cost deployment of **pCell** networks anywhere in the world for LTE, Fixed wireless and Wi-Fi,” said Steve Perlman, Founder and CEO of Artemis, “If you can deploy a cable, you can deploy **pWave Minis**, delivering the highest performance, highest density 5G technology in the world, compatible with today’s wireless devices and future devices.”

pCell technology is far less expensive to deploy or operate than conventional LTE technology, making it attractive to Mobile Network Operators (MNOs), wireline ISPs expanding to mobile, and wireless ISPs (WISPs), whose **pWave Mini** deployments will simultaneously support wholesale LTE service to Mobile Virtual Network Operators (MVNOs) and endpoint Non-Line of Sight Fixed Wireless service to homes and businesses.

“Reducing high-density 5G wireless deployment to standard cable deployment with the **pWave Mini** is a game-changer for both mobile and fixed wireless,” said Jim Chiddix, former Time Warner Cable CTO and Artemis Advisory Board Member, “Now, any ISP—from the largest to the smallest—can rapidly deploy high-density **pCell** 5G LTE and Fixed wireless by using well-established cable deployment practices.”

pCell wireless technology has been successfully trialed outdoors and indoors to concurrently serve both LTE mobile and Fixed wireless users. The trials were conducted in San Francisco to both line-of-sight and non-line-of-sight users, in mobile and fixed wireless scenarios, at low and high user densities. Tests confirmed that **pCell** transmissions met applicable FCC standards, including major mobile operator interference testing.

pCell technology is a revolutionary approach to wireless that delivers full-speed mobile data to every device concurrently, regardless of how many users are sharing the same spectrum. Rather than avoiding interference like conventional wireless technologies, **pCell** technology *exploits* interference, combining



interfering radio waves to create an unshared personal cell (a “**pCell**”) for each device, providing the full wireless capacity to every user at once, indoor or outdoor, even at extremely high user density. While self-interference limits the densification of cellular base stations to 50m radius or more, **pCell** thrives on self-interference, enabling **pWave Mini** base station densification down to 1m or less, achieving orders of magnitude higher area spectral efficiency than cellular.

Demonstrations of pCell and the new pWave Mini are available by appointment in the DISH Network booth, LVCC Central Hall 11421.

About Artemis

Artemis Networks LLC (www.artemis.com) is the creator of **pCell** technology. Founded by technology pioneer Steve Perlman in early 2000s, and incubated for over a decade by Steve’s Rearden Companies incubator (www.rearden.com), Artemis offers **pWave Mini** base stations powered by **pCell Edge Software Defined Radio** for 5G LTE, Fixed Wireless and Wi-Fi for Mobile Network Operators (MNO), cable operators expanding to mobile, and Wireless ISPs (WISPs). Artemis is licensed to operate in DISH spectrum, is partnered with Nokia Networks for deployment with MNOs, and has been deploying **pCell** with a San Francisco WISP partner. **pCell** technology is protected by a broad portfolio of fundamental patents, both US and internationally.

To find out more about **pCell** technology, visit www.artemis.com

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