

AC/DC Power Solutions: The Forgotten Small Cell Requirement

Market Study
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iGR
12400 W. Hwy 71
Suite 350 PMB 341
Austin TX 78738

Table of Contents

Abstract.....	1
Executive Summary	2
Methodology	3
The Need for Small Cells and the Het-Net	4
Figure 1: Het-Net Overview	5
Small Cells Defined	6
Table 1: Het-Net Technologies and Architectures	6
Femtocells	7
Picocells.....	7
Metrocells	8
Figure 2: Metrocell Deployment.....	9
Remote Radio Heads	9
Figure 3: Remote Radio Head Deployed on a Tower	9
Figure 4: Remote Radio Head Deployed Like a Small Cell	11
Distributed Antenna Systems (DAS)	11
Figure 5: Passive DAS Deployed in a Building	13
Figure 6: Active DAS Deployed in a Building	14
Microcells	14
Power Considerations when Deploying Small Cells	15
Power Options Defined.....	16
Local DC Power	16
Figure 7: Local DC Power System	17
Cabinet Systems.....	17
Figure 8: Local DC Power Cabinet System	18
All-in-One Systems.....	18
Figure 9: Local DC Power All-in-One System.....	19
Embedded DC Power System	19
Local AC Power	19
Remote DC Power.....	20
Line Power	20
Figure 10: Remote DC Power - Line Power	21
Figure 11: Remote DC Power - Line Power with Parallel Circuits	22
Low Voltage DC Power.....	22
Figure 12: Remote DC Power - Low Voltage Power	23
Figure 13: Remote DC Power - Low Voltage Power with a Boost Converter	24
Hybrid Optical and Copper Cables	24
Power over Ethernet.....	24
Small Cell Power Requirements	26

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Table 2: Typical Power Options for Small Cells	26
Femtocells	27
Picocells.....	27
Metrocells	27
Remote Radio Heads	28
DAS	28
Backup Power.....	30
Types of Small Cell Backup.....	30
Pros and Cons	30
Local and Remote Backup Options.....	31
Local.....	31
Figure 14: Local DC Power with Battery Backup.....	32
Figure 15: Local AC UPS	33
Remote	33
Figure 16: Remote DC Backup Power	34
Figure 17: Remote AC Backup Power	35
Small Cell Power Vendor Profiles	36
Alpha Technologies Ltd. (ATL)	36
CommScope	39
Figure 18: ION-E Solution.....	40
Delta Electronics	42
DongAh Elecomm	43
Eltek	45
Emerson	46
GE Critical Power	48
Huawei	50
TE Connectivity	52
Figure 19: TE Connectivity Powered Fiber Cable System.....	53
TSI Power Corporation.....	54
Definitions	56
General.....	56
Device Types.....	56
Services	57
Network Technology.....	58
About <i>iGR</i>	62
Disclaimer.....	62

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Abstract

The demand for high quality data services on LTE networks continues to grow as mobile subscribers increasingly use their smartphones and tablets to watch mobile video, stream audio and update social media sites. As this usage increases, mobile operators are evolving their radio access network (RAN) to augment the coverage and capacity of their networks. These dense heterogeneous networks (het-nets) include many types of small cells – indoor small cells (picocells), Wi-Fi, outdoor small cells (metrocells and microcells), Distributed Antenna Systems (DAS), and Remote Radio Heads (RRHs).

Mobile operators must consider many factors when determining the location of the small cells in their het-net. As part of these considerations, the mobile operator must ensure that a steady power source is available and must answer several questions regarding power. Does the small cell require AC or DC power? How much power is required? What power is available at the site? Will backup power be required?

This market study provides an analysis of the power requirements of various small cells, details the types of power systems that are available, and discusses the issues considered when choosing a power source.

Key questions addressed in this study:

- What is a het-net?
- What defines each type of small cell?
- What types of power systems are currently available and what are the benefits of using each type?
- What are the power requirements of each type of small cell and which types of power system are typically deployed for each?
- What types of backup are available and being used today?

This report is recommended for:

- Mobile operators
- Enterprise technical personnel
- Power solution vendors
- Small cell vendors
- Financial and investment analysts.

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