



**How to secure Femtocells
using VaultIC™
Security Modules?**

driving trust **inside**
SECURE

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INTRODUCTION

Due to the popularity of mobile phones at home and the increased demand for mobile voice and broadband capacity, Femtocells, which respond to these demands, have found a ready market. However Femtocells use the Internet to deliver voice and data services which means that there are elevated risks of security attacks. Mobile Operators need to be prepared for these attacks and must employ defenses against them to prevent identity theft, fraud and confidentiality violations. VaultIC Security Modules - based on highly secure microcontrollers used in Banking or ID markets that need a high level of security - can respond to these challenges.

Depending on the size of the data which needs to be secured, the VaultIC Security Modules Family is composed of ATVaultIC200, ATVaultIC400, ATVaultIC420, ATVaultIC440 and ATVaultIC460 can provide an appropriately sized product.

1. WHAT IS FEMTOCELL?

«Originally known as an Access Point Base Station, a Femtocell (or FAP) is a small cellular Base Station (BTS) typically designed for use in a home or small business. It connects to the service provider's network via broadband cable or DSL internet connections; current designs typically support 2 to 4 active mobile phones simultaneously in a residential setting.»
(Source: Wikipedia).

A Femtocell allows Mobile Operators to extend service coverage indoors at the subscriber home or business. It could enhance their Average Revenue Per User (ARPU) and profitability with new tariffs, pricing plans or «Femto Zone» Services.

At the same time, mobile consumers benefit mostly from «five bars» of coverage throughout the household, higher data rates per user, better quality voice and the use of their existing handsets, not to mention the interaction with home networks in new and exciting ways. For instance, Femtocells will make it easier for users to download music and videos, or even control home appliances remotely from the phone.

The Femtocell incorporates the functionality of a typical base station but extends it to allow a simple, self-contained deployment by offering new levels of service to consumers and new economic deployment models for operators.