Vendor Landscape: Wireless LAN

Choose the right WiFi solution – from more than just thin air.

Introduction

The Wireless LAN (WLAN) market keeps changing and growing – along with the value enterprises get out of them. Use Info-Tech's research to help you choose the one most suited to your needs.

This Research Is Designed For:

- ✓ Mid-sized enterprises looking for efficiency and productivity by adding wireless to an existing LAN or upgrading their old wireless to 802.11n.
- ✓ Organizations that rely on mission-critical wireless for day-to-day operations, such as in health-care, education, manufacturing, logistics, and retail.
- ✓ Mid-sized organizations and institutions looking to provide wireless access to customers or their community as a service, such as in hospitality, travel, and government.

This Research Will Help You:

- ✓ Understand the current state of the Wireless LAN market, from both a business and technology perspective.
- ✓ Evaluate Wireless LAN vendors and products for your enterprise needs.
- ✓ Determine which products are most appropriate for particular use cases and scenarios, helping you develop a short-list of the best solutions for you.

Executive Summary

- The WLAN market continues to produce innovation and differentiation, even as core features become commoditized and vendors gradually consolidate. New demands are emerging as more mobile devices invade the enterprise. All the vendors Info-Tech selected for this Vendor Landscape™ are addressing these opportunities and challenges in promising ways.

- Cisco, HP, and Aruba were the Champions – which is no surprise. By most estimates they hold the top three positions in market-share. Cisco especially is the long-standing leader, not just in WLAN but in several other key networking markets. Aruba is a perennial pure-play WLAN leader. HP is the newest of the three in the space, having increased its WLAN presence through acquisitions. All three cater to mid-to-large enterprises with comprehensive line-ups. They each offer excellent security and support, though they are not always the most suitable or affordable solutions.

- HP, Enterasys, and Aerohive offer the most bang for your buck, providing the most features and value relative to three year total cost of ownership.

- For enterprises looking to integrate wireless with wired networks, Cisco, HP, and Enterasys are likely to make your short-list. Few vendors in the space compete in both wired and wireless markets. On the other hand, if wireless performance is your priority, you might look more to dedicated vendors like Aruba, Motorola, Ruckus, Juniper, and Meru, which may offer more reliability and security. And if you need flexibility and ease-of-use, there's a lot to like in the innovative cloud-hosted solutions offered by Aerohive and Meraki.

Market Overview

How it got here

- Improved industry standards and vendor innovations have made enterprise Wireless LANs significantly faster, more reliable and secure.
- Cisco remains the giant in WLAN. By most estimates it commands more market share than all competitors combined.
- A number of big names like HP, Motorola, Siemens (Enterasys), and Juniper have established or strengthened WLAN positions through acquisitions.
- Independent wireless pure-plays like Aruba, Aerohive, Meraki, Ruckus, and Meru, founded through the mid-00s, continue to move the industry forward with impressive solutions and considerable mind-share.

Where it's going

- Consumers are driving more aspects of enterprise technology adoption, demanding support for mobile devices, tablets, and media-intensive applications, which will place more (and different) demands on your enterprise WLAN.
- Standards continue to evolve and speed is projected to increase exponentially, reaching multi-gigabit per second rates around 2013.
- The all-wireless enterprise is already viable, in theory, and will become more compelling as people's perceptions of WiFi's reliability and security catch up to the reality.

Info-Tech Insight

As expectations and demands placed on wireless continue to rise, and as WLANs continue to meet those demands, wired access networks will increasingly become the difficult-to-justify cost that WLANs were a few years ago. The question is not if, but when do you make the switch to prioritize wireless.

WLAN Vendor Landscape selection / knock-out criteria: market share, mind share, and market consolidation

- *The WLAN space has settled to some degree since its inception, but we're still seeing significant new innovations and acquisitions as WiFi grows in stature relative to both wire-line and cellular networking.*
- *For this Vendor Landscape, Info-Tech focused on those vendors that have a strong market presence and/or reputational presence among small to mid-sized enterprises.*

Included in the Vendor Landscape:

- ***Aerohive**. Cloud-hosted, easy-to-deploy wireless networks across multiple sites.*
- ***Aruba**. Best-of-breed wireless pure-play vendor; track record for large, security-sensitive deployments.*
- ***Cisco**. Dominant player holding its position in wired and wireless networking.*
- ***Enterasys**. Security, wired, and wireless integration from a communications mainstay.*
- ***HP**. Top-ranked, thanks to its corporate stature, large product line, and very competitive pricing.*
- ***Juniper**. Rejuvenated focus on simplicity and reliability for a recently-acquired wireless solution.*
- ***Meraki**. Visionary young company with a very scalable, cloud-hosted solution for multi-site wireless.*
- ***Meru**. Mission-critical wireless where voice and density are top-of-mind.*
- ***Motorola**. Large & secure wireless networks suited for distributed, multi-site organizations.*
- ***Ruckus**. High performance at long range from a scrappy innovator.*

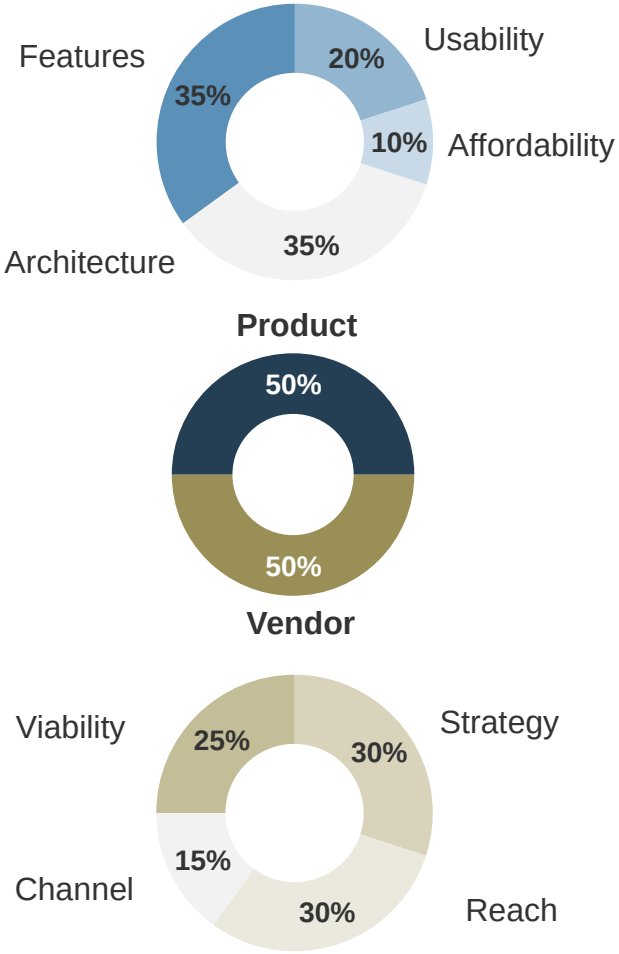
Wireless LAN Criteria and Weighting Factors

Product Evaluation

Features	The solution provides basic and advanced feature/functionality.
Affordability	The three year TCO is economical.
Usability	The solution's dashboard and reporting tools are intuitive and easy to use.
Architecture	The delivery method of the solution aligns with what is expected within the space.

Vendor Evaluation

Viability	Vendor is profitable, knowledgeable, and will be around for the long-term.
Strategy	Vendor is committed to the space and has a future product and portfolio roadmap.
Reach	Vendor offers global coverage and is able to sell and provide post-sales support.
Channel	Vendor channel strategy is appropriate and the channels themselves are strong.



The Info-Tech Wireless LAN Vendor Landscape

Champions receive high scores for most evaluation criteria and offer excellent value. They have a strong market presence and are usually the trend setters for the industry.

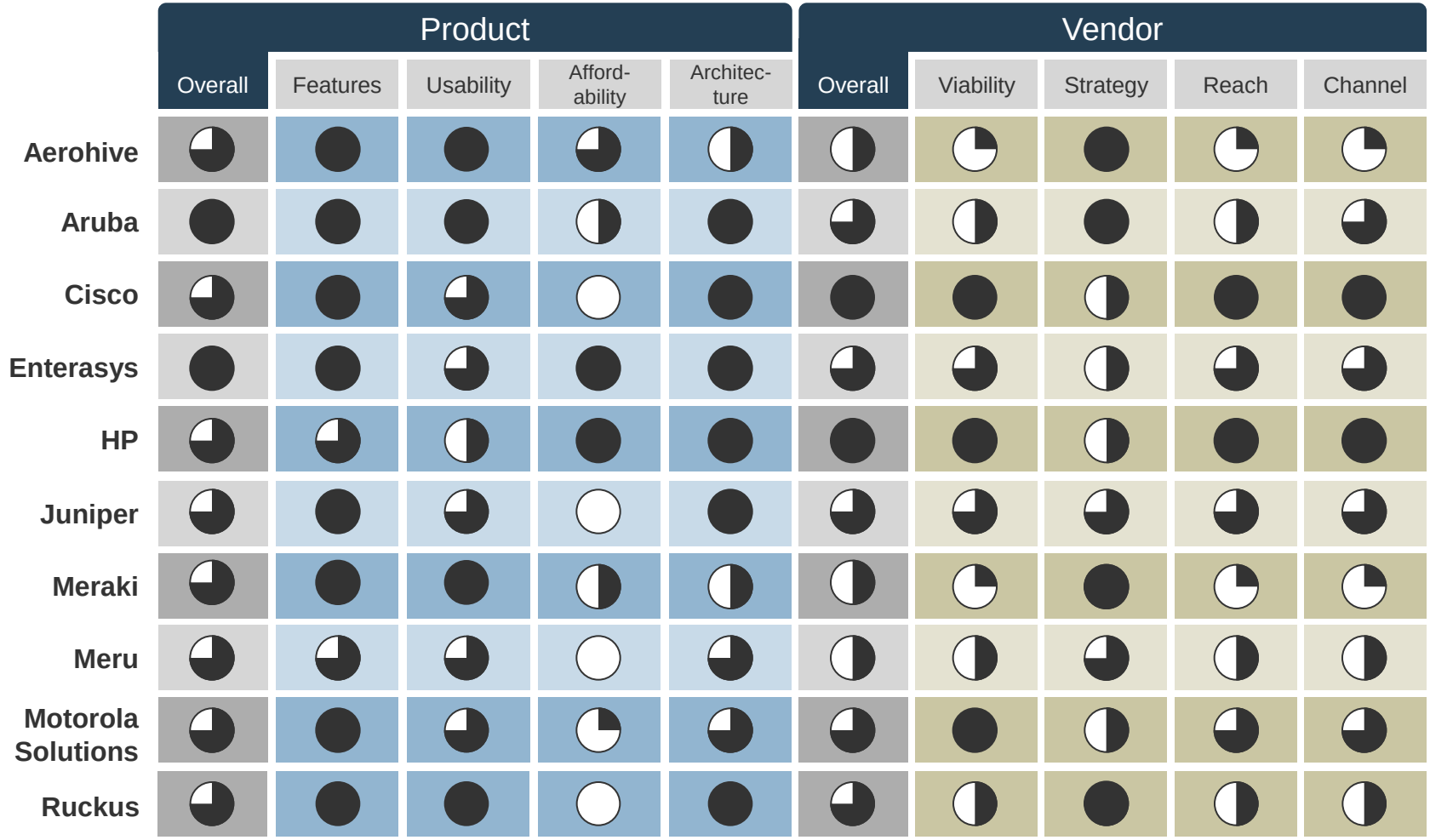
Market pillars are established players with very strong vendor credentials, but with more average product scores.

Innovators have demonstrated innovative product strengths that act as their competitive advantage in appealing to niche segments of the market.

Emerging players are newer vendors who are starting to gain a foothold in the marketplace. They balance product and vendor attributes, though score lower relative to market Champions.

For an explanation of how the Info-Tech Vendor Landscape is created, please see *Vendor Evaluation Methodology* in the appendices.

Every vendor has its strengths & weaknesses; pick the one that works best for you



For an explanation of how the Info-Tech Harvey Balls are calculated, please see *Vendor Evaluation Methodology* in the appendices.

HP, Enterasys, and Aerohive offer the most bang-for-the-buck

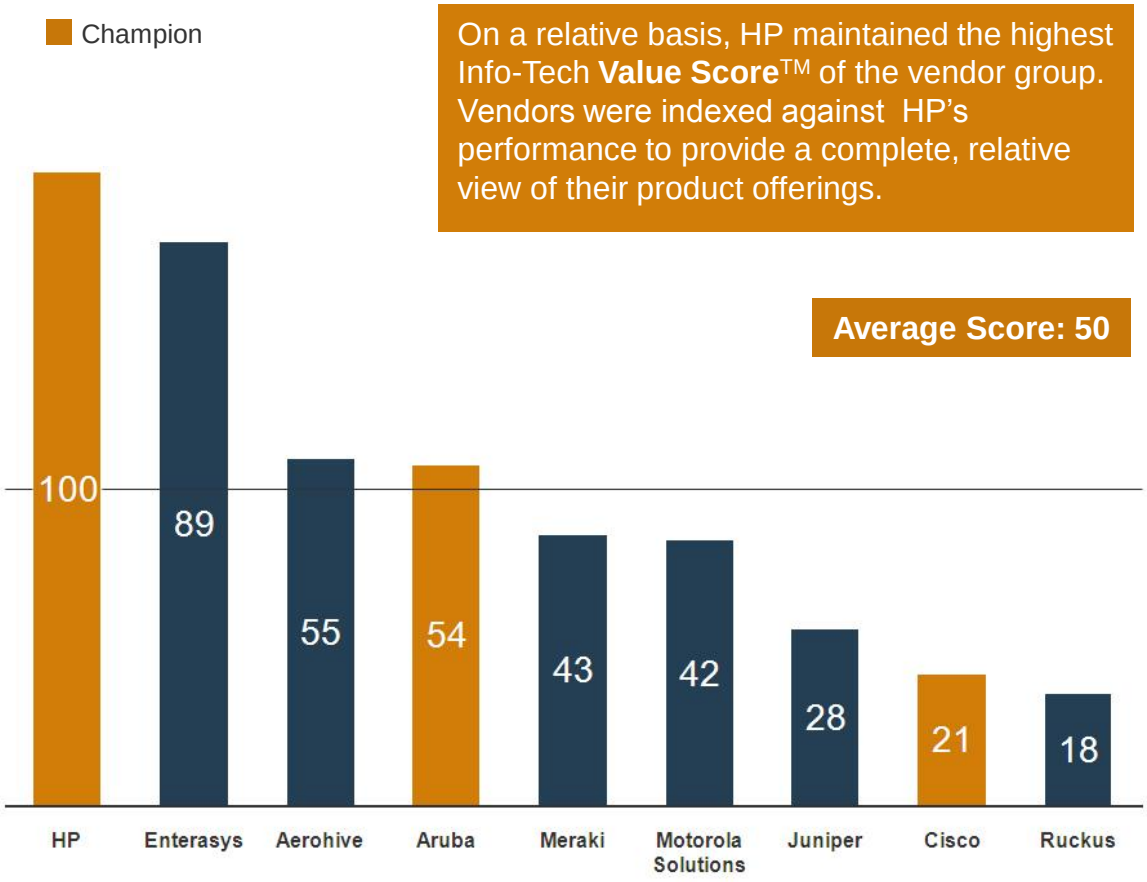
What is a Value Score?

The Value Score indexes each vendor's product offering and business strength **relative to their price point**. It **does not** indicate vendor ranking.

Vendors that score high offer more **bang-for-the-buck** (e.g. features, usability, stability, etc.) than the average vendor, while the inverse is true for those that score lower.

Price-conscious enterprises may wish to give the Value Score more consideration than those who are more focused on specific vendor/product attributes.

Note: Meru did not provide a comparable estimate.



For an explanation of how the Info-Tech Value Index is calculated please see *Value Index Ranking Methodology* in the appendices.

For an explanation of how normalized pricing is determined please see *Product Pricing Scenario & Methodology* in the appendices.

Table Stakes represent the minimum standard; without these, a product doesn't even get reviewed

The Table Stakes

Feature	Description
Basic Hardware	802.11n, dual-band, multi-radio access points (APs).
Basic Security	Standards-based authentication and encryption, RADIUS integration, rogue AP/intrusion detection.
Basic Intelligence	Traffic prioritization, quality of service (QoS) based on standards, automatic RF resource/spectrum management.
Basic Management	Policy & resource management, incident & error logs, basic site planning.

What Does This Mean?

The products assessed in this Vendor Landscape™ meet, at the very least, the requirements outlined as Table Stakes.

Many of the vendors go above and beyond the outlined Table Stakes, some even do so in multiple categories. This section aims to highlight the products capabilities **in excess** of the criteria listed here.

Info-Tech Insight

If Table Stakes are all you need from your Wireless LAN solution, the only true differentiator for the organization is price. Otherwise, dig deeper to find the best price to value for your needs.

Advanced Features are the market differentiators that make or break a product

Scoring Methodology

Info-Tech scored each vendor's features, offering a summation of their individual scores across the listed advanced features. Vendors were given 1 point for each feature the product inherently provided. Some categories were scored on a more granular scale with vendors receiving half points.

Feature	What We Looked For
Mesh networking	All of the vendor's APs can intelligently optimize over-the-air routing.
Telecommuter / remote AP	Stand-alone APs that operate on the same network but independently in remote locations.
Advanced rogue / intrusion prevention	Wireless intrusion prevention system (WIPS): Beyond simple detection to actively initiate counter-measures against rogue APs.

Advanced Features

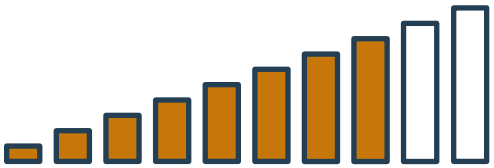
Feature	What We Looked For
Stateful firewall	Able to monitor the client's connection state and filter traffic using granular attributes.
Application- & service-aware policies	Granular policy settings for specific apps, like file sharing and streaming.
Performance & usage reporting	Drill-down analysis from enterprise-wide to individual APs and clients.
Client health monitoring	IT can proactively identify computers and devices in need of attention.
Advanced site planning	Including comprehensive floor plan upload and RF spectrum analysis.
Advanced management	Single-pane-of-glass management of multiple wired & wireless networks, security, and other apps.
Guest access / captive portal	Simple & secure provisioning for guests to get online without corporate intranet access.

Each vendor offers a different feature set; concentrate on what you need

Cisco is the market-share leader with global presence

Champion

Product:	Cisco
Employees:	73,408
Headquarters:	San Jose, CA
Website:	Cisco.com
Founded:	1984
Presence:	NASDAQ: CSCO FY10 Sales: $40 billion



3 year TCO between $250,000 and $500,000

Overview

- By far the largest WLAN market share, Cisco has been in the space since 1999, and it is one of the world's largest network equipment makers.

Strengths

- Offers a large array of hardware suited to various specialized needs, especially for large deployments, for example, access points designed specifically for stadiums.
- Enterprises with large IT hardware budgets may prefer to procure end-to-end hardware and support from a few large venders like Cisco.

Challenges

- Support costs are high for Cisco.
- Smaller firms may find the cost and complexity of a Cisco solution prohibitive.
- Integrating the products and services of one large vendor can lead to locked-in dependencies, which can limit future options.

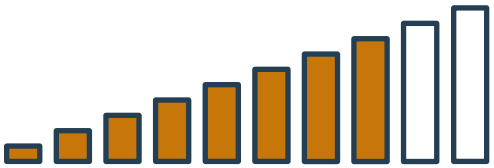
Info-Tech Recommends:

Cisco is a robust, secure, popular choice, and is often a short-listed vendor.

HP leverages its global resources to offer integrated wired and wireless networking solutions

Champion

Product:	HP
Employees:	324,600
Headquarters:	Palo Alto, CA
Website:	HP.com
Founded:	1939
Presence:	New York: HPQ
	FY10 Revenue: $126B



3 year TCO between $250,000 and $500,000

Overview

- Sophisticated array of WLAN solutions, notably through acquisitions of 3Com and Colubris, adding to HP's large ProCurve lineup.

Strengths

- Full integration of wired and wireless networks with single-pane-of-glass management is HP's key differentiator.
- Deep pockets and strong global presence of HP's sales channels and support.
- Extremely competitive pricing, among the best Info-Tech saw.

Challenges

- Multiple product lines from a single vendor can create confusion, potential complications, and uncertainty about HP's long-term commitment to support specific products.
- WLAN is only one relatively small business on HP's strategic radar.

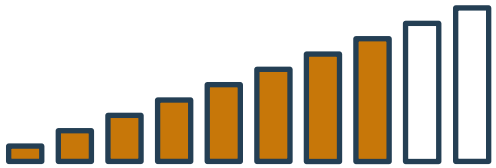
Info-Tech Recommends:

HP is a good choice for large institutions and enterprises looking to deploy an integrated wired and wireless network within a low budget.

Aruba is the best-in-class wireless pure-play vendor

Champion

Product:	Aruba Networks
Employees:	1,100
Headquarters:	Sunnyvale, CA
Website:	ArubaNetworks.com
Founded:	2002
Presence:	NASDAQ: ARUN FY10 Revenue: $267 million



3 year TCO between $250,000 and $500,000

Overview

- Aruba continues to show outstanding growth as the largest pure-play vendor in enterprise WLAN, second in overall market-share behind Cisco.

Strengths

- One of the most robust, well-rounded, and innovative lineups of wireless solutions we looked at, suitable for a variety of indoor, outdoor, and industrial deployments.
- Security is among the best-in-class.
- Ability to manage wired, wireless, and legacy networks from multiple vendors on one dashboard (AirWave).

Challenges

- Aruba is still smaller and younger than some of the integrated vendors they compete with.
- Aruba doesn't offer a comprehensive lineup of wired hardware, though it recently introduced a role-based wired access switch.

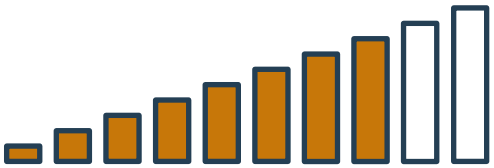
Info-Tech Recommends:

Aruba should make a lot of short-lists, especially where security is a priority.

Enterasys is a communications pioneer, able to integrate large-scale wireless with wired and voice networks

Innovator

Product:	Enterasys
Employees:	14,000
Headquarters:	Andover, MA
Website:	Enterasys.com
Founded:	2000
Presence:	Privately held
	FY08 Revenue: $4 billion



3 year TCO between $250,000 and $500,000

Overview

- Enterasys merged with Siemens Enterprise Communications in 2008 to unlock complementary value in the two companies' technology portfolios.

Strengths

- Integration with voice and data network solutions in the comprehensive Siemens Enterprise Communications portfolio.
- One of only a few vendors that sells integrated wired and wireless networks.
- Trying an innovative approach to network management through users' existing social networking interfaces.

Challenges

- Enterasys may lose mind-share as the market matures and differentiates increasingly through perceived usability and branding.

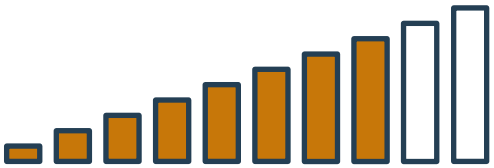
Info-Tech Recommends:

Short-list if you're looking for a fully integrated enterprise-class network solution.

Ruckus is a scrappy innovator making inroads in mid-market enterprise

Innovator

Product:	Ruckus Wireless
Employees:	325
Headquarters:	Sunnyvale, CA
Website:	RuckusWireless.com
Founded:	2004
Presence:	Privately held
	FY10 Revenue: $81 million



3 year TCO between $250,000 and $500,000

Overview

- Established mind-share with unique radio technology, smart meshing, and simplified deployment. Focused on carrier WLAN services, off-load, and mid-market enterprise.

Strengths

- Extended range and reduced dead spots by directing signals around obstacles and interference with Ruckus's advanced beamforming technology.
- Streaming HD video is highlighted as a key promise.
- Automatic guest provisioning with a patented Dynamic Pre-Shared Key solution.

Challenges

- Like most WLAN vendors, Ruckus doesn't sell wired LANs.
- Smaller than Aruba and much smaller than some of the IT giants in the market.
- Some advanced security features like stateful firewall and intrusion countermeasures are not available.

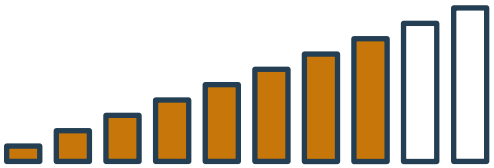
Info-Tech Recommends:

Look at Ruckus if you need reliable, high quality wireless for a constantly changing group of users.

Aerohive provides easy-to-deploy, cloud-managed wireless solutions

Innovator

Product:	Aerohive
Employees:	170
Headquarters:	Sunnyvale, CA
Website:	Aerohive.com
Founded:	2006
Presence:	Privately held



3 year TCO between $250,000 and $500,000

Overview

- Aerohive is an innovator of cloud-managed WLAN technology, focused on enterprises that are distributed across branch locations.

Strengths

- Aerohive's WLAN solution is one of the easiest to deploy; its APs configure and handle RF management without the need for additional configuration or investment in large controllers.
- All-in licensing means no added costs for features.
- Easy to plan AP deployments with HiveManager

Challenges

- As a relatively new startup in the WLAN space, Aerohive must grow its channel presence and customer awareness.
- HiveManager can't be used to manage third-party wireless network infrastructure.

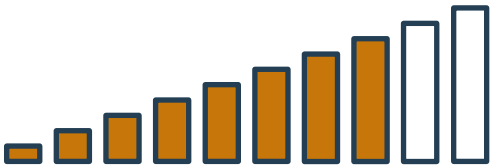
Info-Tech Recommends:

Aerohive is a good choice for enterprises spread out over many locations, such as retail.

Juniper offers reliability with the promise of simple setup and security

Market Pillar

Product:	Juniper Networks
Employees:	8,772
Headquarters:	Sunnyvale, CA
Website:	Juniper.net
Founded:	1996
Presence:	New York: JNPR
	FY:10 Revenue: $4.09B



3 year TCO between $250,000 and $500,000

Overview

- Jumped into the WLAN market through its acquisition of Trapeze Networks in late 2010, which Juniper has aggressively updated with its current brand.

Strengths

- Reliability of Juniper's stateful failover controller, enabling networks to self-heal with zero impact after a controller outage.
- Juniper identifies itself as offering the industry's simplest policy enforcement experience.
- Junos Pulse: network client integrates provisioning, VPN, mobile device management, and other functions.

Challenges

- Juniper 's acquisition of Trapeze is still relatively recent; it will have to earn a track record for delivering on its high promises.
- RingMaster is a trusted management solution, but shows its age next to leaders in WLAN usability like Meraki.

Info-Tech Recommends:

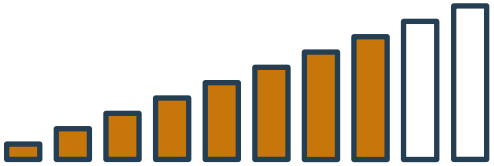
Juniper's failover solution is ideal for healthcare and other mission-critical environments.

Motorola Solutions offers large and secure distributed wireless with great security

Market Pillar

Product:	Motorola Solutions
Employees:	23,000
Headquarters:	Schaumberg, IL
Website:	Motorola.com
Founded:	1928
Presence:	New York: MSI
	FY10 Sales: $7.9 billion

MOTOROLA SOLUTIONS



3 year TCO between $250,000 and $500,000

Overview

- Built largely through acquisitions, separate from Motorola Mobility's consumer device business (though Motorola does try to leverage its mobility brand and suggests benefits of network-device interoperability).

Strengths

- Scalability and adaptability are Morotola's focus
- Security through the AirDefense suite sets the industry standard (with additional infrastructure and cost).
- Organizational resources to address the needs of large deployments.

Challenges

- Lacks an integrated wired solution, which will be a challenge as Motorola competes directly with Cisco and HP.

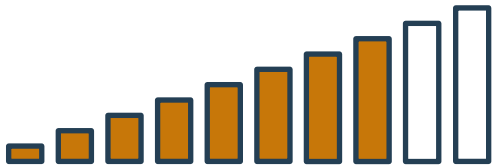
Info-Tech Recommends:

Look at Motorola Solutions if you want a lot of flexibility to increase your wireless capacity and security, either now or in the future.

Meru is known for mission-critical, high-end, high-density wireless networks

Emerging Player

Product:	Meru Networks
Employees:	292
Headquarters:	Sunnyvale, CA
Website:	MeruNetworks.com
Founded:	2002
Presence:	NASDAQ: MERU
	FY10 Revenue: $85 million



Vendor did not disclose comparable price

Overview

- Focused on the high end of the wireless market, specifically for organizations willing to pay for reliable connectivity in mission-critical environments.

Strengths

- Density and ability to handle a variety of network demands.
- Stability is maintained through Meru's unique virtual channels that stay with devices as they move.
- Partnership Solar Winds for management of integrated wired and wireless networks.

Challenges

- Like most WLAN vendors, Meru doesn't sell wired LANs.
- Smaller than Aruba and much smaller than some of the IT giants in the market.

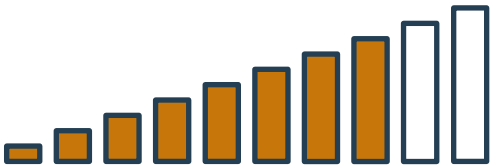
Info-Tech Recommends:

Meru is a good choice for mission-critical, high-density, primarily wireless networks.

Meraki makes simple and very scalable wireless networks

Emerging Player

Product:	Meraki
Employees:	Not disclosed
Headquarters:	San Francisco, CA
Website:	Meraki.com
Founded:	2006
Presence:	Privately held Revenue not disclosed



3 year TCO between $250,000 and $500,000

Overview

- Born out of an MIT research project, Meraki captured attention through a well-publicized, Google-supported public WiFi project in San Francisco.

Strengths

- Easy to deploy and manage through cloud-based architecture and fully-hosted management.
- Scaling up is as easy as deploying, thanks to its self-configuring APs, making Meraki ideal for outdoor public access networks and hotspots.
- Offers cloud-managed wire-line routers suited for branches.

Challenges

- Security will be a trade-off for Meraki's remarkable usability.
- Meraki has had to adjust its original visions of public WiFi built on open source technology as it iterates its business model.

Info-Tech Recommends:

Look at Meraki if you need an easy-to-deploy, scalable wireless network.

Identify leading candidates with the *WLAN Vendor Shortlist Tool*

The Info-Tech *WLAN Vendor Shortlist Tool* is designed to generate a customized shortlist of vendors based on *your* key priorities.

This tool offers the ability to modify:

- Top-level weighting of product vs. vendor criteria
- Individual product criteria weightings:
  - ✓ Features
  - ✓ Usability
  - ✓ Affordability
  - ✓ Architecture
- Individual vendor criteria weightings:
  - ✓ Viability
  - ✓ Strategy
  - ✓ Reach
  - ✓ Channel

Shortlist Preparation Worksheet

Assign each Evaluation Criterion a Client Weighting (light blue cells) from 0% (not appropriate for the project) to 100% (the only factor of consideration for the project). Client Weightings should sum to 100%. The Total cell will display green when the total equals 100%, and red when the total does not equal 100%. If the Total cell is not green (and does not equal 100%), please adjust the Client Weightings until the total equals 100%.

Vendors will be ranked based on the provided Client Weightings. A customized Vendor Landscape™ and Vendor Shortlist of weighted scores will be generated. Results are displayed on the Shortlist Generator tab.

Enterprise Name: [Enterprise Name Here]

Evaluation Criteria	Criteria Description	Info-Tech Weight	Client Weight
Vendor Weight	*The relative importance of the vendor score in the overall evaluation.*	50%	50%
Product Weight	*The relative importance of the Product Score in the overall evaluation.*	50%	50%
Total		100%	100%
Viability	*Vendor is profitable, knowledgeable, and will be around for the long-term.*	25%	25%
Strategy	*Vendor is committed to the space and has a future product and portfolio roadmap.*	30%	30%
Reach	*Vendor offers global coverage and is able to sell and provide post-sales support.*	30%	30%
Channel	*Vendor channel strategy is appropriate and the channels themselves are strong.*	15%	15%

Still waiting for the all-wireless enterprise

Only a few vendors offer integrated wired and wireless LANs. Others don't sell wired LANs but do offer integrated management.

1 **Integrated**

2 Dedicated

3 Secure

Fully Integrated

Offer Integrated Management

Performance, reliability, and ease-of-use: pushing wireless to its full potential

Don't overlook innovative WLAN vendors pushing wireless beyond the quality, security, and usability of wired LANs.

1 Integrated

2 Dedicated

3 Secure

Performance-Focused

ARUBA networks

JUNIPER NETWORKS

MOTOROLA SOLUTIONS

MERU NETWORKS

Ruckus WIRELESS

Usability-Focused

Aerohive NETWORKS

meraki

Viable

CISCO

hp

enterasys Secure Networks

When security is top-of-mind

Security features are becoming Table Stakes, but some vendors set themselves apart.

1 Integrated

2 Dedicated

3 Secure

Best Security Track Records

ARUBA networks · MOTOROLA SOLUTIONS · CISCO · enterasys Secure Networks · JUNIPER NETWORKS

Best Security Features

ARUBA networks · MOTOROLA SOLUTIONS · CISCO · enterasys Secure Networks · JUNIPER NETWORKS · hp · Aerohive NETWORKS

Appendix

- Vendor Evaluation Methodology
- Value Index Ranking Methodology
- Product Pricing Scenario & Methodology

Vendor Evaluation Methodology

Info-Tech Research Group's Vendor Landscape market evaluations are a part of a larger program of vendor evaluations which includes Solution Sets that provide both Vendor Landscapes and broader Selection Advice.

From the domain experience of our analysts as well as through consultation with our clients, a vendor/product shortlist is established. Product briefings are requested from each of these vendors, asking for information on the company, products, technology, customers, partners, sales models and pricing.

Our analysts then score each vendor and product across a variety of categories, on a scale of 0-10 points. The raw scores for each vendor are then normalized to the other vendors' scores to provide a sufficient degree of separation for a meaningful comparison. These scores are then weighted according to weighting factors that our analysts believe represent the weight that an average client should apply to each criteria. The weighted scores are then averaged for each of two high level categories: vendor score and product score. A plot of these two resulting scores is generated to place vendors in one of four categories: Champion, Innovator, Market Pillar, and Emerging Player.

For a more granular category by category comparison, analysts convert the individual scores (absolute, non-normalized) for each vendor/product in each evaluated category to a scale of zero to four whereby exceptional performance receives a score of four and poor performance receives a score of zero. These scores are represented with "Harvey Balls", ranging from an open circle for a score of zero to a filled in circle for a score of four. Harvey Ball scores are indicative of absolute performance by category but are not an exact correlation to overall performance.

Individual scorecards are then sent to the vendors for factual review, and to ensure no information is under embargo. We will make corrections where factual errors exist (e.g. pricing, features, technical specifications). We will consider suggestions concerning benefits, functional quality, value, etc; however, these suggestions must be validated by feedback from our customers. We do not accept changes that are not corroborated by actual client experience or wording changes that are purely part of a vendor's market messaging or positioning. Any resulting changes to final scores are then made as needed, before publishing the results to Info-Tech clients.

Vendor Landscapes are refreshed every 12 to 24 months, depending upon the dynamics of each individual market.

Value Index Ranking Methodology

Info-Tech Research Group's Value Index is part of a larger program of vendor evaluations which includes Solution Sets that provide both Vendor Landscapes and broader Selection Advice.

The Value Index is an indexed ranking of value per dollar as determined by the raw scores given to each vendor by analysts. To perform the calculation, Affordability is removed from the Product score and the entire Product category is reweighted to represent the same proportions. The Product and Vendor scores are then summed, and multiplied by the Affordability raw score to come up with Value Score. Vendors are then indexed to the highest performing vendor by dividing their score into that of the highest scorer, resulting in an indexed ranking with a top score of 100 assigned to the leading vendor.

The Value Index calculation is then repeated on the raw score of each category against Affordability, creating a series of indexes for Features, Usability, Viability, Strategy and Support, with each being indexed against the highest score in that category. The results for each vendor are displayed in tandem with the average score in each category to provide an idea of over and under performance.

The Value Index, where applicable, is refreshed every 12 to 24 months, depending upon the dynamics of each individual market.

Product Pricing Scenario & Methodology

Info-Tech Research Group provided each vendor with a common pricing scenario to enable normalized scoring of Affordability, calculation of Value Index rankings, and identification of the appropriate solution pricing tier as displayed on each vendor scorecard.

Vendors were asked to provide *list* costs for WLAN appliances and/or WLAN software licensing to address the needs of a reference organization described in the pricing scenario. For non-appliance solutions (*i.e.* software-only and virtual appliance architectures), physical or virtual hardware requirements were requested in support of comparing as-installed costs.

Additional consulting, deployment, and training services were explicitly out of scope of the pricing request, as was the cost of *enhanced* support options, though vendors were encouraged to highlight any such items included with the base product acquisition. The annual software/hardware maintenance rate was also requested, along with clarity on whether or not the first year of maintenance was included in the quoted appliance/software costs, allowing a three-year total acquisition cost to be calculated for each vendor's WLAN solution. This three-year total acquisition cost is the basis of the solution pricing tier indicated for each vendor.

Finally, the vendors' three-year total acquisition costs were normalized to produce the Affordability raw scores and calculate Value Index ratings for each solution.

Key elements of the common pricing scenario provided to WLAN vendors included:

- Head office requiring 200 dual band 3x3 MIMO 802.11n access points, redundant controllers capable of supporting 300 APs, or annual licensing costs if cloud-based controller.
- Large branch requiring 50 dual band 3x3 MIMO 802.11n access points, local controller (not redundant) capable of supporting 60 APs and failing over to head office controller(s) in the event of a failure, or annual licensing costs if cloud-based controller.
- Small branch requiring 10 dual band 2x2 MIMO 802.11n access points, local controller (not redundant) capable of supporting 12 APs and failing over to head office controller(s) in the event of a failure, or annual licensing costs if cloud-based controller
- Teleworkers/SOHO requiring 10 dual band 2x2 MIMO 802.11n access points, licensing costs for remote, standalone AP – must be manageable from main controller or cloud console. If no standalone AP solution is available, please provide pricing for 10 of the smallest controllers
- Support & Maintenance, either either as a percentage of the original list price of the solution annually, specific support contract costs annually, or the ongoing annual cost if a cloud solution. Please include 8x5xNBD advanced hardware replacement, call in technical support, and software updates and patches.