lopoco

low power systems

Company Profile

- Ultra-Efficient Server designer & manufacturer (www.lopoco.com)
  - ¼ – ½ the power usage of conventional servers
  - Standard processors, memory & drives; Standard contract manufacturers
  - Broad installed base – Zero field failures
  - “Most Efficient Server” ever certified by experts Power Assure Corporation
  - Designed for use with existing servers & racks – no compatibility issues
  - Silicon Valley headquarters. Founded 2010 by Intel, Sun, HP industry veterans
- Customer Benefits
  - Save money → 50% lower Data Center energy costs & lower server cost
  - Save space → use fewer racks
  - Save energy → realize green computing
  - Run cool and quiet → producing much less heat and vibration, the two causes of most server failures
  - Longer run times on backup power source

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Company Introduction

CUSTOMERS

LIGHT & MOTION

SYMSOFT SOLUTIONS
Creation through Collaboration

methodics™

Datafiniti
The Search Engine for Data

pogoseat

VisualOn

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Why

- Green

  Green computing, for most of the industry, is still largely talk. **Lopoco** brings real green computing solutions to the table in the form of right-sized server platforms that conserve power usage, especially when idle (over 90% of the time)

- TCO

  Reducing the power consumption of your servers means you can not only reduct your electric bill, but also reduce your HVAC costs an equal or greater amount.

- Availability

  By utilizing two or three lower cost, lower power, smaller physical footprint servers in the place of one large, expensive, fire-spewing conventional server, higher uptimes can be achieved at a lower price point and lower overall TCO.

- ROI

  Server farms of the same throughput can be built in less physical space, leaving room to grow without replacing, substantially increasing ROI.

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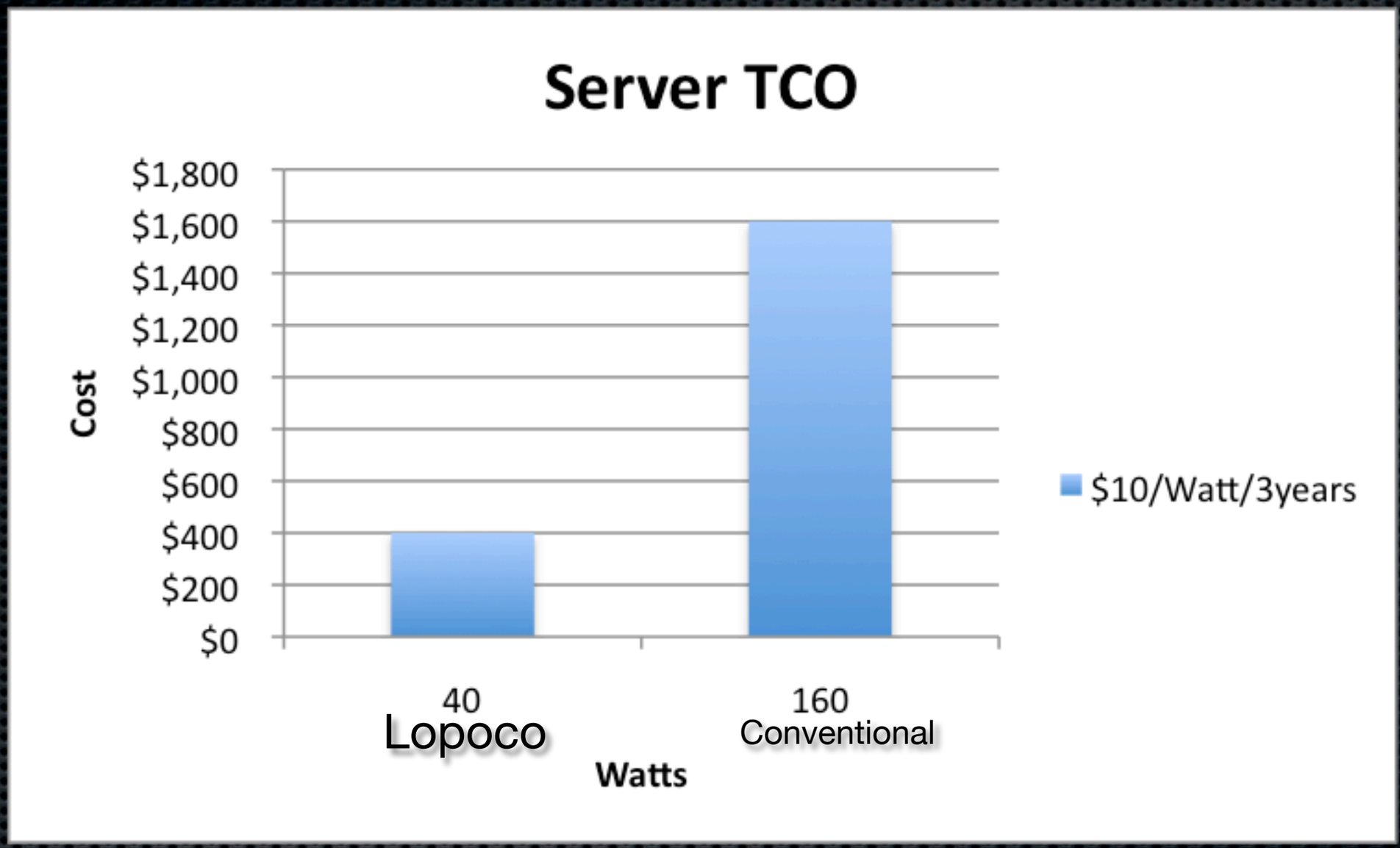
Why



Total cost to operate v. Avg. power consumption

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Market

- Dramatically reducing data center operating costs and the costs of service availability will give you an unfair advantage against your competitors.
- **The market is going green**. Everyone realizes that the cost to operate larger and larger datacenters is getting too high, and electricity isn't going to get cheaper. Until now, finding servers that meet these desired market trends has been next to impossible.
- The industry is trending towards smaller, higher granularity, servers to increase overall service availability regardless of hardware outages.
- Competitors will be looking for ways to decrease costs so they can spend more on marketing and innovation.

Server Solutions - 1U

Microservers LP-2180, LP-8240	LP-2230/LP-4255 Medium Weight	LP-6240 Heavy Weight
Fanless; short case depths; very low TDP; excellent appliance: firewall; router; load balancer; email; file/backup server; cluster-in-a-closet	2 or 4 core journyman with excellent idle power usage as well as constrained TDP	Six core workhorse for heavy web framework applications (Tomcat, Ruby), high concurrency, expandability
• 1.8 GHz, quad logical core • 2.4 GHz, 8-core, 32GB ECC • 2 Intel Gb LAN; 4 Intel Gb LAN • Disks: 2 internal - 8 hot plug • 11.5-20” deep	• 2/4 or 4/8 core/thread • up to 32 GiB DDR3 ECC • 2 - 6 Intel LAN; 10Gb (optional) • up to 10 hot plug disks • 11.5-20” deep	• 12 logical cores, 2.4 GHz • up to 512 GiB DDR3 ECC • 2 - 8 Intel LAN; 10Gb (optional) • up to 10 hot plug disks • 20” deep
• 20 watts idle / 30 watts TDP	• 21 watts idle / 55 watts TDP	• 35 watts idle / 110 watts TDP

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Storage Server Solutions - 2U

LPS-1624	LPS-2472
Large capacity, low power footprint; multiple databases; backup services; video file storage; medium load file sharing	Extra large capacity, up to 72 TB, large databases; high load file sharing; streaming video; backend photo/video server
• up to 4 int. SSDs for OS or caching • 16 or 24 hot plug drives, 48 TB max • 2 - 6 Intel Gib LAN • Optional: 10Gb LAN • up to 32 GB • 2/4 or 4/8 core/thr	• Up to six int. SSDs for caching • 24 to 72 hot plug drives, 144 TB max • up to 6 Intel 1Gb LAN or 10Gb • 12 logical cores, 2.4 GHz • up to 512 GB memory • up to 4 - 24 drive enclosures can be added
• 35 watts idle / 105 watts TDP	• 45 watts idle / 120 watts TDP

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Professional Services

- Full suite of professional services for the datacenter:
  - high level design
  - installation/ construction
  - software and network configuration
  - testing
  - tuning
  - monitoring services
  - openstack implementation
  - hadoop installation & configuration
  - firewall configuration
  - remote access
  - router & networking configuration
  - configuration maintenance
- Custom software pre-installation and configuration.
- Custom programming and debugging, profiling and bottleneck analysis.
- Power consumption auditing for State and Federal Tax incentives and PG&E incentives.
- Capacity planning.

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Software

ONE STOP SHOP

- Pre-installation of favorite Linux or Unix distribution.
  - Debian and Ubuntu are our specialties
- Disk partitioning and raid configuration upon request
- Installation of customer owned / licensed software:
  - Redhat, Centos, Custom
  - Windows Server, SQL, Sharepoint

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Support & Warranty

- One year limited warranty against hardware defects or failures
- Two year additional support contract available