

HOW TO AVOID THE BIGGEST RIP-OFF IN NETWORKING

PUBLISHED: 03 AUGUST 2017
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This document highlights the research findings most relevant to non-OEM optical transceivers. A link to the entire Gartner, Inc. research article is available at the end of this summary.

SUMMARY

Network transceivers make up 10% to 15% of enterprises' network capital spending, and most suppliers excessively overcharge. I&O leaders responsible for networking can use this research to help curtail wasteful spending and reallocate it to more strategic initiatives.

OVERVIEW

KEY CHALLENGES

- Many enterprises are looking to limit capital spending, which is challenging given that most networking purchases are capital-intensive.
- Most enterprises negotiate a single discount level for all networking hardware on a given deal, which leads to overspending on certain components where deeper discounts are available.
- Network original equipment manufacturers (OEMs) and their channel partners often use aggressive sales tactics, as well as fear, uncertainty and doubt (FUD) to scare enterprises away from using third-party transceiver OEMs that offer lower prices.

RECOMMENDATION (NON-OEM)

I&O leaders seeking to optimize network infrastructure spending should:

- Not allow OEMs to use FUD. Reduce your spending and gain leverage against OEMs by using non-OEM-branded transceivers.

INTRODUCTION

Cost optimization has become a critical and continuous discipline for many I&O leaders. This research identifies a powerful, simple yet widely unused mechanism to save money on networking capital purchases. Network transceivers are very common, and are included in most network deals that we have observed. Transceivers are typically small interface modules that provide physical transmit/receive capability.

Transceivers account for a surprisingly high percentage (10% to 15%) of network product spend across multiple network markets including data center networking, wired campus switching and network packet brokers.

However, nearly all OEMs mark up transceivers much more than other hardware products. Also, in the Asia/Pacific (APAC) region, we regularly observe system integrators substituting third-party transceivers in client deals, but charging higher prices affiliated with OEM-branded transceivers.

Thus, we observe enterprises overpaying for transceivers by 50% or more on a regular basis. For example, we commonly observe organizations purchasing 10G SFP+ short-reach transceivers for an average of \$450. By following the guidance in this research, organizations can acquire this part for \$100 to \$250. Further, we estimate that this part costs the network OEM between \$50 and \$100. Thus, the enterprise is often purchasing the part at a markup of 350% or more.

ANALYSIS (NON-OEM)

USE NON-OEM-BRANDED TRANSCEIVERS TO REDUCE YOUR SPEND AND GAIN LEVERAGE AGAINST OEMS

In some cases, renegotiating with existing vendors for a better discount will not suffice. Also, in a small percentage of cases, vendors won't discount transceivers into the 75% range. In these instances, an alternative option is to use non-OEM transceivers, also referred to as "third-party" transceivers. Most transceivers used within an enterprise are basic commodity 1G and 10G Ethernet interfaces with little opportunity for innovation.

Third-party transceivers are available from numerous companies...This creates further savings, as out-the-door prices are typically 80% to 90% lower than OEM list prices. The vast majority of transceivers that OEMs use are simply rebranded from manufacturers such as Finisar. Thus, if you buy a third-party transceiver, you're likely getting the same physical part, from the same OEM as if you were buying directly from your network OEM.

DEBUNKING FUD

We've observed that network OEMs and their channels use aggressive sales tactics to scare enterprises away from third-party optics, claiming it is "illegal" to use them, or that it will "void the warranty." This is simply not true.

Network OEMs have different policies regarding support for third-party interfaces in their equipment. While most OEMs don't restrict third-party optics, they also do not officially support the third-party transceiver. Several require that the enterprise make an (often-undocumented) switch port configuration setting.

When using third-party transceivers, it is possible that the OEM may ask the organization to physically remove the transceivers from a device during an active open support case, to eliminate them as a culprit. This rarely happens in practice, but should it occur, organizations can implement self-sparing of OEM-branded transceivers or apply an 80/20 or 90/10 ratio of non-OEM to OEM-branded transceivers.

SAMPLE OEM SUPPORT POLICIES

The following is a sample of support policies of network OEM product portfolios:

- [Cisco](#)
- [Juniper](#)
- [Extreme](#)
- [Cumulus](#)
- [Arista](#)
- [Gigamon](#)

QUESTIONS TO ASK A THIRD-PARTY SUPPLIER (SA = SMITH'S ANSWER TO THESE QUESTIONS)

There are a large number of third-party transceiver suppliers, with similar marketing messages. It can be difficult to ascertain differences between suppliers, but asking the following questions of your prospective third-party supplier will help to determine if they are an appropriate fit:

Are the transceivers tested to interoperate with my OEM, equipment models and the software releases that are running in my live network?

SA: Smith optical transceivers are programmed and tested to operate seamlessly within your OEM environment. Smith utilizes the same contract manufacturers as the OEMs and our modules are identical in form, fit, and function.

What is your testing process to ensure compatibility with my OEM?

SA: Smith tests our modules at every major point along the production line; from auditing contract manufacturing facilities to performing advanced functional, platform, and network testing upon arrival in California. Each module shipped from Smith undergoes a rigorous testing process, including compliance verification for distance, wavelength, traffic density, and light. All Smith transceivers are then tested within their intended switch/platform. Virtually every manufacturer is represented in the production test bed.

What is your warranty policy (if limited lifetime warranty, provide details)?

SA: All Smith optical transceivers come with a limited lifetime warranty. In the unlikely event of a defect or failed optic, Smith will immediately overnight a replacement, minimizing critical downtime to our global customer base.

How many paying customers do you have using similar components in my geography?

SA: In all likelihood - hundreds. Whether in your geography or in your vertical, Smith will have an active customer you can speak with about the quality of our products and services.

How do you verify that components are not counterfeit?

SA: Smith does not buy or sell brokered or "OEM original" product. Smith purchases direct from the largest contract manufacturers in the world and programs and tests our optics in our own stateside facilities.

Please list all the OEMs for whom you provide third-party compatible optics:

SA: 3Com, Adtran, Adva, Aerohive, Alcatel, Allied Telesis, Alvarion, Arista, Aruba, Asus, Avaya, Blade Networks, Brocade, BTI, Calix, Coriant, Check Point, Chelsio, Ciena, Cisco, D-Link, Dell, Delta, ECI Telecom, Enterasys, Extreme, F5 Networks, Finisar, Fluke Networks, Force10, Fortinet, Foundry, FTTX, Fujitsu, Gigamon, H3C, HP, Huawei, IBM, Intel, JDSU, Juniper, Linksys, Marconi, Mellanox, Meraki, MRV, NETGEAR, Nokia, Nortel, Nutanix, Oplink, Overture, Palo Alto, Pannaway, Planet, Rad Group, Redback, Riverbed, Riverstone, Sixnet, SMC, Sun, Sunrise Telecom, Tejas Networks, Telco Systems, TP Link, Transition Networks, TRENDnet, Ubiquiti, XKL, Zhone, ZTE, Zyxe

Click here to read the entire research article on the Gartner, Inc. website:

[How to Avoid the Biggest Rip-Off in Networking | www.gartner.com](#)



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