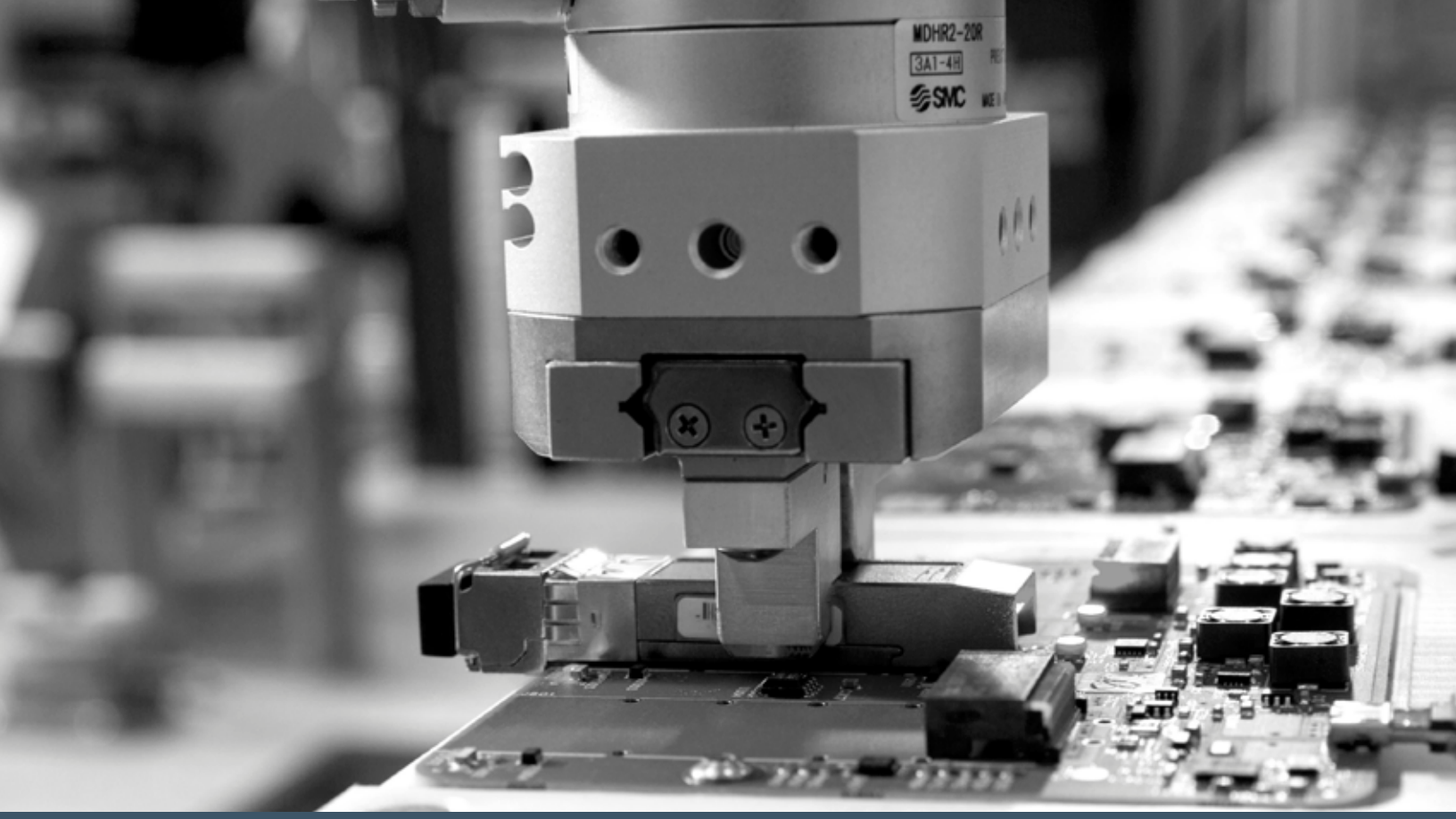

Get the Green Light: A Trusted Versus Trendy Solution

For more than a decade, many of the largest brands in the industry have recognized and benefited from the use of third-party optics, and third-party optics are becoming the norm versus the exception. All major OEMs have begun to accept third-party optics as part of an overall budget-friendly, reliable network solution, and some OEMs are going so far as to proactively partner with third-party optics providers to secure wider network deals.

Perception is often reality though, and change itself is the biggest hindrance to realizing savings. When engineering teams are hesitant to give the green light to third party optics, below are some realities to consider:

1. What Engineers May Say:

Non-OEM optics aren't worth the risk. I've personally had a bad experience in the past, and they are unreliable/incompatible.

Reality:

They're right – they may have had a bad experience with third party optics in the past. Like most OEM replacements, there are different grades of products. Some third parties' sole focus is price, and quality takes a backseat as a result. Many of the third party optics you find online are low quality, cheap, untested and even uncoded. An optical transceiver RFP often results in a race to the bottom, ending with a low quality product.

Unfortunately for the transceiver industry, there are no set rules or regulations dictating the quality of raw materials that make up a transceiver, or the process. Even with quality components, a flawed process can have disastrous results on the finished good. With many manufacturers, optics are coded to a generic standard that meets the requirements of most platforms, often never being tested on a specific platform before being shipped to the end user.

Choose a partner whose optics start with only the best materials and first-quality equipment. By automating functions such as coding, testing, inventory and shipping, Integra can accurately scale production capacity to handle virtually any order. By eliminating human error, Integra ensures that its optics are delivered identically coded to the OEM and triple-tested 100% of the time. This results in transceivers that are actually more reliable than both OEM and third party generics.

2. Engineers May Say:

We lose maintenance and training credits if we reduce total spend with the OEM by purchasing optics elsewhere.

Reality:

Maintenance and training shouldn't be a kicker or nice-to-have. Integra's engineers spend much of their time providing on-site/remote assistance and training, which is automatically part of our partnership with customers.

OEM maintenance and training credits are also rarely worth much unless you have a single-source solution. You'll more than likely run up against similar challenges in multi-network and multi-platform environments, whether your solution is multi-OEM or third-party-based. Cisco won't provide maintenance on Juniper parts and vice versa.

In the past, Integra's engineers have actually been the first to identify why an OEM's software update directly impacted their own optics or another OEM's optics in a customer's network. This is because our team of engineers intimately understands the associated code for over 50+ OEM platforms.

3. Engineers May Say:

We don't have the time/resources to test your optics in our lab.

Reality:

You rely on others' trusted lab tests everyday – think common household goods, your car's safety rating, air travel. Integra is more than willing to provide documentation and certification of optics already deployed in some of the world's large MSOs and telecom providers. Asking optics providers for this documentation may help reduce testing/lab time.

Furthermore, Integra's mechanical automation ensures that its optics are delivered identically coded to the OEM, every time.

4. Engineers May Say:

We don't want to deal with configuring hardware to ignore soft errors with non-OEM optics.

Reality:

You don't have to. Integra's code reads identical to the OEM. This is one of the reasons Integra defines 100% interoperability as NO alarms, and why basic MSA compliance is not enough.

When a "closed" platform meets a transceiver, it reads the memory areas and looks for specific, identifying characteristics. Similar to a job interview, the platform uses a Q&A session to validate the transceiver. Each OEM platform has its own language, with required fields and information. The platform cross references the read data against an internal table, requires a specific combination of checkboxes be marked, and/or even uses password schemes for validation.

Choose a partner whose transceivers go beyond MSA compliance, and are identically coded to each OEM platform, every time, ensuring your network operates exactly as intended without any warnings or alarms.

5. Engineers May Say:

Using third-party optics will void my OEM support warranties.

Reality:

Per Cisco and every other OEM, using third party optics will never void your OEM warranty or service level agreements, and in fact, it is illegal to do so. Network equipment manufacturers all have guidelines stating that warranty support on their products will not be affected by installing a third-party transceiver.

The truth is, denying warranty support is illegal per the Magnuson-Moss Warranty Act (known as the Consumer Protection Act in Canada). The act prohibits manufacturers from linking a warranty to the use of branded products sold by the same manufacturer. Plus, if there ever is a concern, Integra's engineering team is able to provide on-site assitance and troubleshooting support.

6. Engineers May Say:

If OEM TAC (Cisco, Nokia, Ciena, Juniper, etc.) sees that I am using non-Cisco optics, they may make me swap it out before providing me with any kind of tech support.

Reality:

This is a non-issue with Integra's optics. Our strict adherence to identical OEM coding ensures there will never be an 'unsupported transceiver error'. The switch sees the optic as an OEM optic. Additionally, the Sherman Antitrust Act of 1890 and the Clayton Act of 1914 also both prohibit tying arrangements. "A tying arrangement occurs when, through a contractual or technological requirement, a seller conditions the sale or lease of one product or service on the customer's agreement to take a second product or service."*

How does this apply to third-party optics? See Cisco's policy below:

> When a product fault or defect occurs in the network, and Cisco concludes that the fault or defect is not attributable to the use of third-party memory, cables, GBICs, filters, or other non-Cisco components installed by a customer or reseller, Cisco will continue to provide support for the affected product under warranty or covered by a Cisco support program.**

The large scale adoption of third party optics by large telecom, MSO, and Enterprise customers has made the use of third party the norm rather than the exception, even with OEM technical assistance centers. Bottom-line: OEMs cannot void the system's manufacturing warranty and support if the customer users third-party components/transceivers.

7. Engineers May Say:

We don't want to deal with cutting a separate PO for something like an optic.

Reality:

The extra effort of cutting a second PO can save significant money for your organization. In many cases, you can save 50-70% of the optics cost by switching to third party. That's hard dollars that go right to the bottom line or money that can be applied to more advanced technology.

Optics can account for up to 20 percent of a given bill of materials and according to Gartner, are being marked up as much as 350 percent! In today's industry, OEMs are simply processing transceiver orders from somebody else, and bundling their pricing to protect margins on their hardware.

We find that once customers realize they can maintain identical coding to OEM platforms for a fraction of the cost, the savings far outweighs the minimal paperwork. In fact, some customers simply cut a separate PO or purchase higher volumes and keep inventory on hand to use as projects arise. This reduces the paperwork and opens the door for volume pricing discussions.

Reshaping the Industry

Integra has partnered with dozens of large MSOs and telecom providers in North and South America that have either fully made or are in the process of making a 100 percent switch to third-party optics. These customers have successfully transitioned to third-party and are realizing ongoing significant capital and operational savings.

If that isn't comfort enough, the data centers of over 30 Fortune 100 companies are currently operating with third-party transceivers while maintaining quality and reliability.

This groundswell of leading companies moving to third-party is reshaping the industry to position third-party optics as the norm, rather than the exception, for customers as well the OEMs. This new mindset includes OEM TAC acceptance of third-party when troubleshooting network issues.

*https://www.justice.gov/atr/competition-and-monopoly-sinsection-2-sherman-act-chapter-5

**https://www.cisco.com/c/en/us/products/warranties/warranty-doc-c99-740959.html