

SKYLANE_DOC 2018_RevA

Quality Makes the Differences

Sourcing Worldwide





Audit

Thanks to local presence and ongoing audits of suppliers we ensure we always have access to the best products from the best contract manufacturers at the best prices. To give an idea of our local involvement, we visit our contract manufacturers every month and we assess, on average, 50 new companies yearly.

> Corporate social responsibility (CSR)

At Skylane Optics, we only work with partners who respect ethical standards, European norms and respect the environment.





Contract Manufacturers

In Asia, hundreds of companies claim to make transceivers. Out of these 10 are really good, 20 are not too bad and the rest are either trading companies or poor quality manufacturers. At Skylane Optics, we only work with partners having sufficient size to guarantee technological expertise and quality processes. Our main partners have hundreds of qualified employees and generate more than \$100 million annual sales. Some of them are even listedon the Stock Market.

> Vertically-integrated

As well as working with vertically-integrated partners, our design enables us, in a long-term perspective, to be always competitive on pricing, to respect short leadtimes and to be able to serve massive volume requested by the biggest US and European DC and tiers1/tiers2 telecom operators.environment.

Quality

For transceivers the quality difference cannot be seen with the naked eye. While all the transceivers will work on day one, the risk of reliability issues over time can be very high following manufacturing processes. At Skylane Optics, the manufacturing environment is strictly compliant to the most advanced standards, which will ensure long term reliability.

> ESD/ Class 10K Clean Room

ESD protection is mandatory, both on the production line but also during all transceiver handling steps. Rooms and equipment have to be clean in order to avoid any contamination.

> Testing

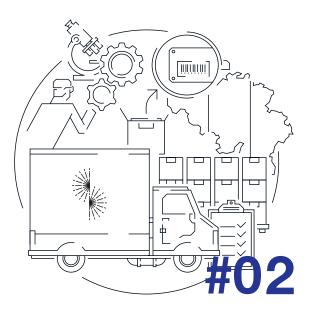
Final testing is an important part of making transceivers. To save costs, some companies only test at room temperature which does not guarantee that the products also work at high and low temperatures. Our contract manufacturers have invested in climatic chambers and ThermoStream, confirming the working temperature and enabling testing in volume. To guarantee long term reliability, all new transceiver designs are tested following the Telcordia GR468.



Skylane Optics

Team Belgium





Logistic center

Our Logistics center based in Belgium is responsible for:

> Incoming and Outgoing Quality Control (IQC/OQC)

They, among other things, check the packaging, control the cleanliness of optical interfaces. Regarding electronical and optical IQC, they verify the micro-controller, the light transmission and wavelength.

> Traceability & Stock

Each transceiver is labelled with its unique serial number, part number and description before being stocked. Skylane Optics have full traceability from the production line to the end-customer.

> Programming

The optical module will be programmed before shipment (depending on the requested compatibility).

> Quality

To guarantee long term reliability, we only manipulate our optical modules inside a Clean Room and with ES protection. Our Logistics Center is fitted to release up to 30,000 programmed pieces on a monthly base (per shift).

R&D & Product Management

> R&D program

At Skylane Optics we know the importance of making the right choice of design, component and assembly method when releasing a new product. Our R&D team focuses mainly on new innovative technologies starting with active participation in International standards and regulations DG connect programs like:









In the past 20 months, we have invested more than 4.4 million in R&D.

> Product Management

Our Product Committee is in charge of the complete product lifecycle from New Product Introduction (NPI) to End of Life (EOL) including Product Change Notification (PCN) and product replacement. Our Product Lifecycle process is in full compliance with European regulations.

Product management

Quality is our main priority; all new products, beforebeing released on the market have to successfully passquality tests and at the very least be consistent with MSA standards. Each piece is stressed in our lab where we measure and analyze, among other things, perfomance, compliance with standards, power consumption, eye diagram, sensitivity and wavelength. We have invested more than \$1 million in a cutting-edge infrastructure, equipping our Laboratory based in Belgium.

> Product certifications & Warranty

- Each Skylane Optics product is certified and MSA compliant
- Approved certification by Independent and recognized German Labs





-To cover liability Skylane Optics pay a yearly license fee for each transceiver design

Customers Key Benefits





European supplier

> Stock

We have more than 300 part numbers in stock for a value of \$2.2 million.

> Fast delivery

Our large stock, based in Belgium, allows us to supply our customers everywhere in Europe the next business day.

> On-site support

Our highly experienced field engineers are available to assist you during qualification process.

> Full compliance with European regulations

Openness

> Core Business

At Skylane Optics, optical modules are our main business and not one part of our portfolio, meaning that we allocate all our resources and energy to this technology.

> Open Sources & standards

While the market is moving into the white box business model, Skylane Optics is following the trend by strictly following all standards.

> Any size, any product, any type and anycolor

We provide 100% compatible transceiver; additionally, with transceiver types not available from the system vendors.

Reliable and Proven Quality

> 99,98% of reliability

The importance we give to quality allows us to offer high-end solutions with a very high reliability level.

Group	Accumulated number of hours in field
1G	15 960 639 895
10G	1 215 123 197
Copper	705 376 827

Group	Number of fi eld failures	MTTF [y]
1G	70	11 309
10G	59	1022
Copper	18	1944

Cost optimization

Our strong market knowledge in combination with large volume purchasing power enables us to offer cost-effective solutions.