



EPIC



*European Photonics
Industry Consortium*



EPIC Photonics Index Universe

Antonio Raspa, EPIC

Photonics

The physical science of
generating, manipulating and detecting light



Photonics is ubiquitous!



Photonics is ubiquitous!

Photonics



WHY?

Funding company growth requires

INVESTORS



(Friends, Banks & Agencies, Incubators, Business Angels, Family Offices, Venture Capitals, Corporate investors, ...)

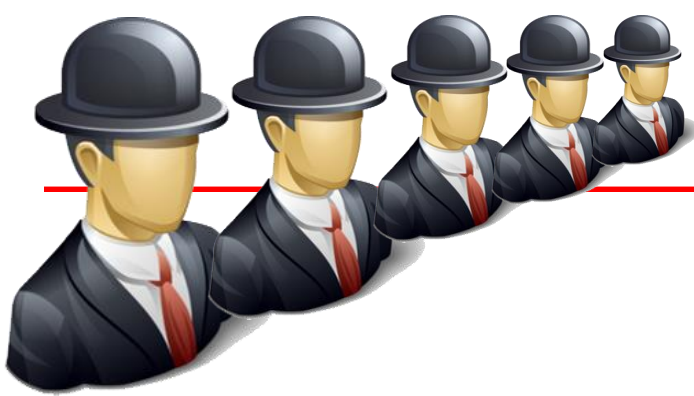
They want to earn money

They need clear benchmarks

They don't care too much about technology

The investment must be immediately relatable and relevant

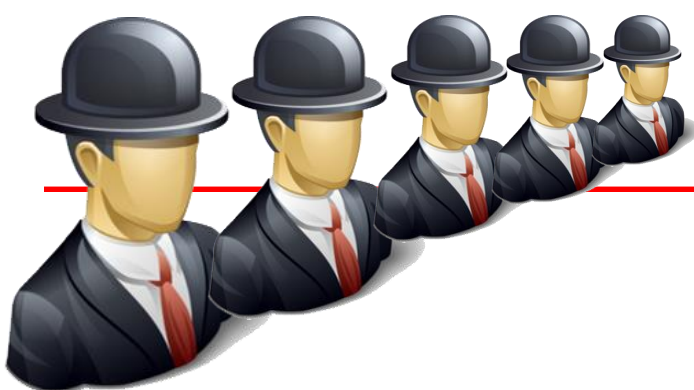
HOW ?



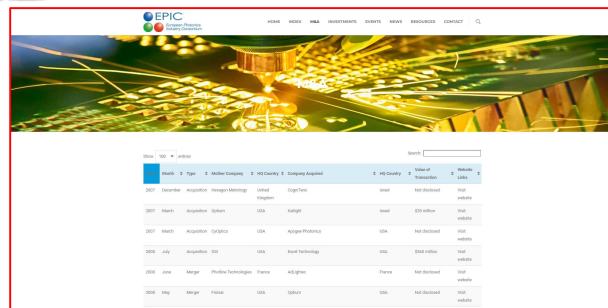
Understanding their **LANGUAGE**

Raising interest for the noun ***PHOTONICS***

Showing clearly that it is a **PROFITABLE** industry



... a long journey!



2015

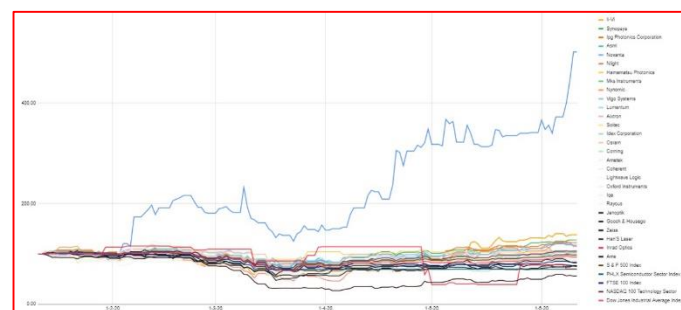
June 2020

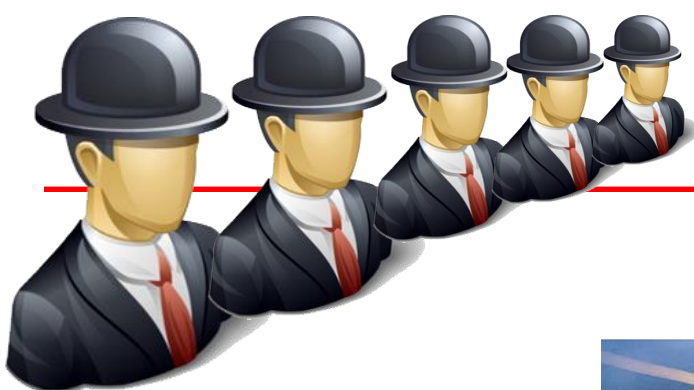
June 2021

September 2021

January 2022

...





Keep memory of past investments



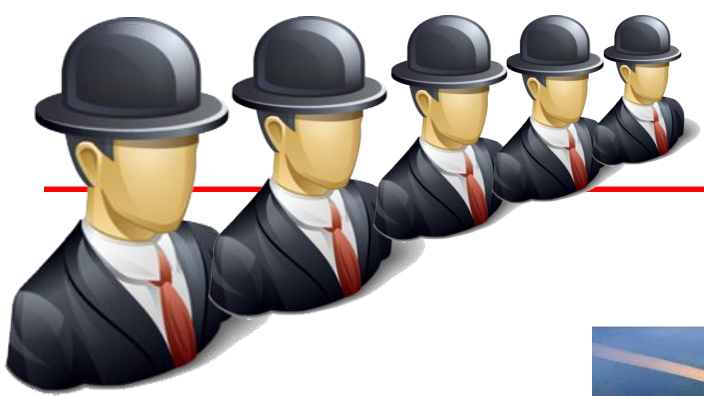
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Year Month Name of Company Country
 2006 November Intematix USA

Show 100 entries Search:

Year	Month	Name of Company	Country	Amount raised	Series A (first round) or B (second round)	Investors	Website Links
2006	November	Intematix	USA	\$16.5 million	Series C	Crosslink Capital and Samsung Ventures, Presidio STX, Draper Fisher Jurvetson, East Gate Capital and Pacifica Fund.	Visit website
2007	December	Holochip	USA	\$2.7 million	Series A	ITU Ventures	Visit website
2007	November	Michelson Diagnostics	UK	£600,000	Series A	London Seed Capital, London Business Angels and Catapult Venture Managers.	Visit website
2007	November	Arbor Photonics	USA	\$85,000	Not disclosed	University of Michigan's Ross School of Business.	Visit website
2007	October	Light Blue Optics	United Kingdom	\$26 million	Series A	Earlybird Venture Capital of Germany, Capital-E, 3i plc and NESTA.	Visit website
2007	October	Reflex Photonics	USA	\$3 million	Series A	FIER Succes, MSBI Capital, RESO Investments.	Visit website



Keep memory of past M&A



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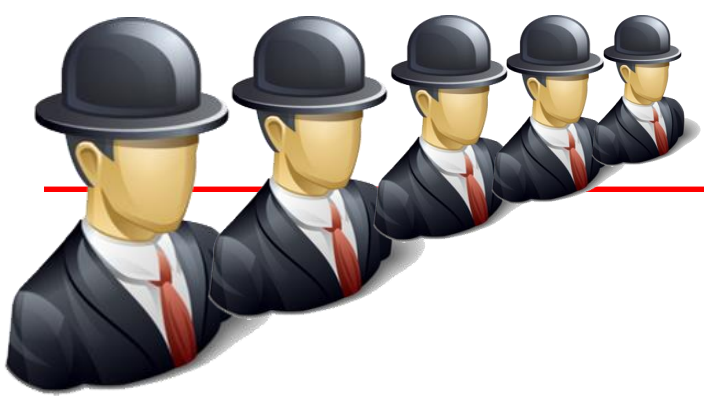


Year Month Type Mother Company

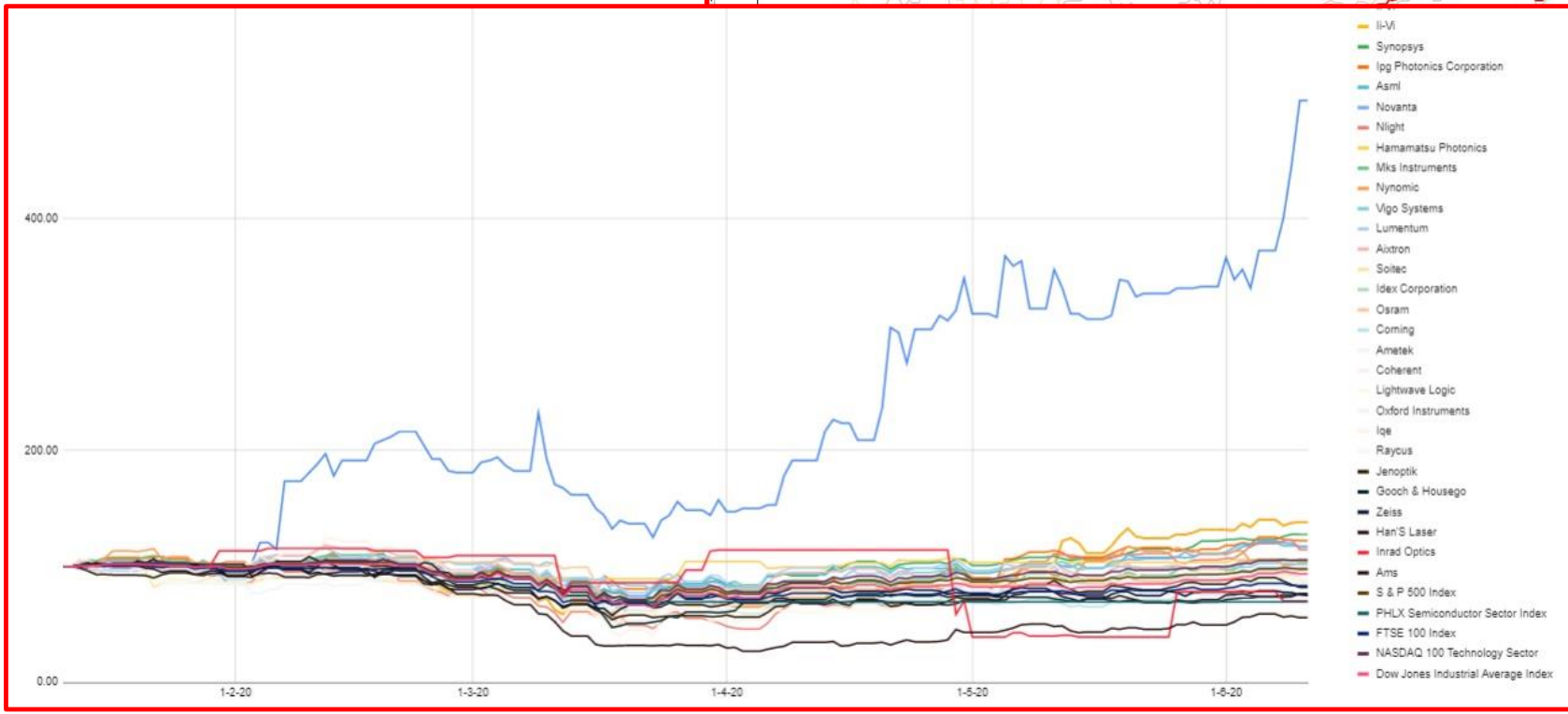
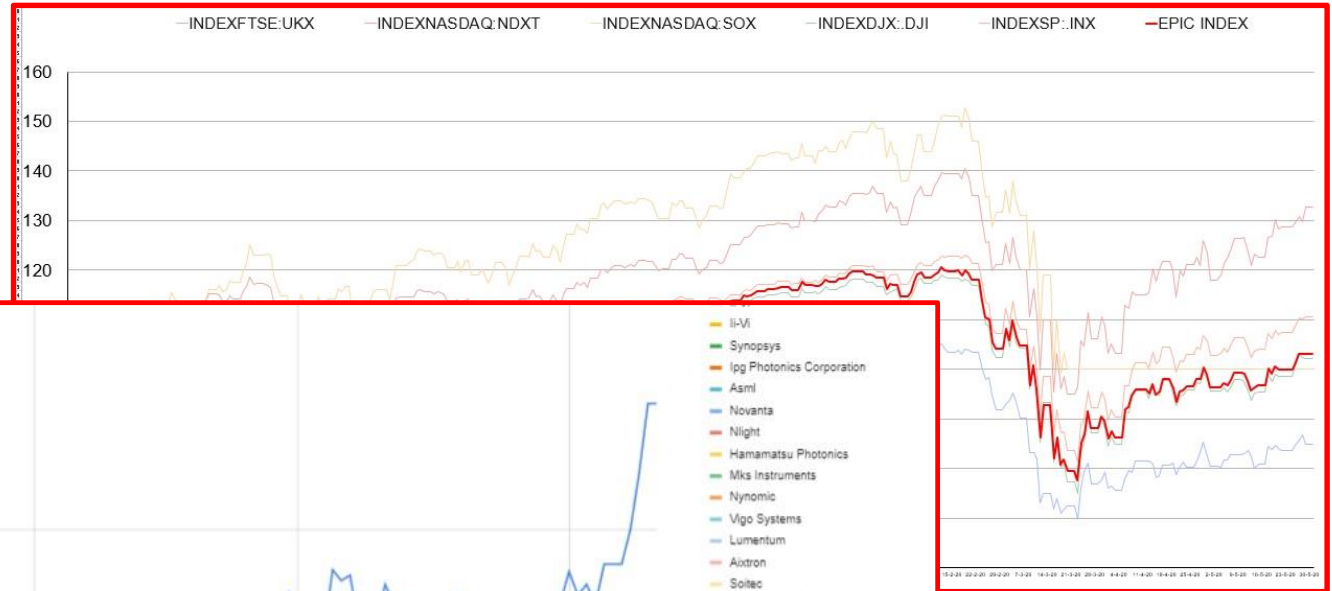
2007 December Acquisition Hexagon Metrology

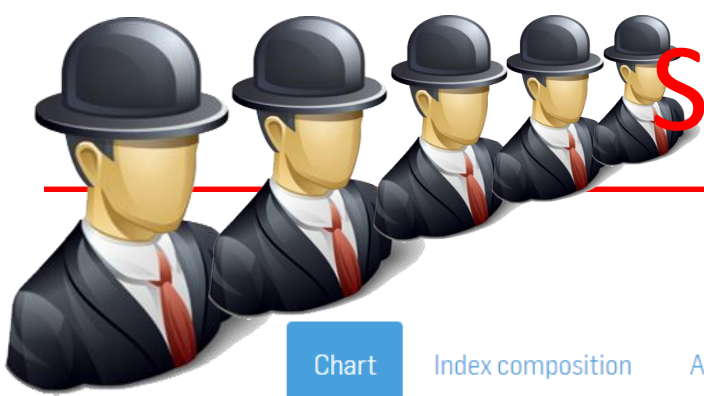
Show 100 entries Search:

Year	Month	Type	Mother Company	HQ Country	Company Acquired	HQ Country	Value of Transaction	Website Links
2007	December	Acquisition	Hexagon Metrology	United Kingdom	CogniTens	Israel	Not disclosed	Visit website
2007	March	Acquisition	Optium	USA	Kaillight	Israel	\$35 million	Visit website
2007	March	Acquisition	CyOptics	USA	Apogee Photonics	USA	Not disclosed	Visit website
2008	July	Acquisition	GSI	USA	Excel Technology	USA	\$360 million	Visit website
2008	June	Merger	Photline Technologies	France	AdLightec	France	Not disclosed	Visit website
2008	May	Merger	Finisar	USA	Optium	USA	Not disclosed	Visit website



Analyze data from stock market





Solactive EPIC Core Photonics Index

Chart

Index composition

Announcements

Documents

Zoom

Intraday

1 Week

1 Month

3 Month

1 Year

5 Years

YtD

Max

From

Dec 31, 2014

To

Apr 1, 2022



Active since June 1st, 2021 - Available daily back to 31.12.2015



Solactive EPIC Core Photonics Index



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2.1. INDEX UNIVERSE REQUIREMENTS

The INDEX UNIVERSE is comprised of all financial instruments which fulfill the below requirements (the "INDEX UNIVERSE REQUIREMENTS"):

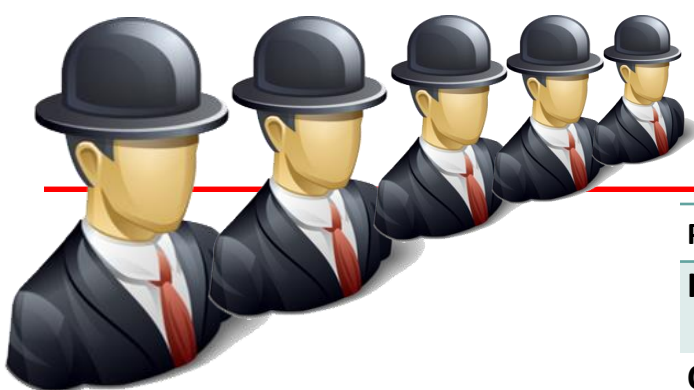
- Publicly listed equity listed on any of either Developed or Emerging Market regulated exchange.
 - The list of countries classified as either Developed or Emerging Market can be found on the Solactive website under: <https://www.solactive.com/documents/>
- Is not listed on any Chinese exchange or available through the Connect Service.
- Does not derive more than 50% of its revenue from the Military or Weapons manufacturing sectors.
- Has any detectable exposure to the PHOTONICS manufacturing industry (based on the most recent Annual Report) as determined by the SELECTION PARTY using publicly available from reported financial statements.

The INDEX ADMINISTRATOR has outsourced the determination of the INDEX UNIVERSE to the SELECTION PARTY. Such outsourcing has been made in accordance with the requirements of the BMR (Article 10 BMR).

The determination of the INDEX UNIVERSE is fully rule-based and the SELECTION PARTY cannot make any discretionary decisions.

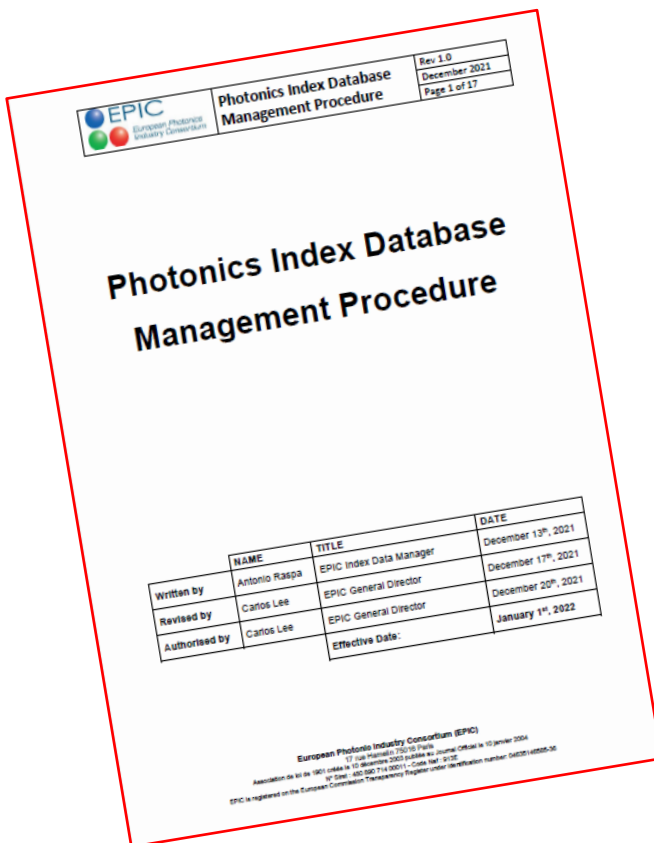
EPIC is the ***Selection Party***

The ***Selection Party*** cannot make any discretionary decisions



EPIC Photonics Index Universe

PHOTONICS CATEGORY	Applications & Markets	Examples
Industrial Products	OEM Raw Materials/Components for Industrial Applications	Augmented Reality, Virtual Reality, Optical Components, Optical glass, filters, prisms, coatings, lens, laser chips to be integrated, image sensors to be integrated, Epitaxial Wafers Manufacturer, Precision Moulded Optics, Thermal Imaging Optic
Consumer Products	OEM Components for Consumer Products	Automotive Lighting, LED Systems, Autonomous Vehicle Sensor Manufacturing, LIDAR, Components for office laser printers/scanner, displays (smartphones, tv, PC, etc), cameras (smartphones, professional cameras, etc), Optical mice and disk drivers, fingerprint ID, Pure Manufacturer of LCD and OLED Displays, Opto-Electronics
Lasers	Laser Sources & Laser Material Processing Equipment	laser sources and laser machines cutting, welding, cleaning, 3D printing, metal cladding, lithographic processes
Environmental	Solar Energy & Environmental Improvement	LED Lighting, Ultraviolet Lighting, lighting for agri-food Solar Energy Solutions Provider
Telecom	Telecommunications, Satellite & Internet Equipment	Telecom Cables, Optical Transmission Technology, Fibre Networks, Optical transmitters and receivers, low consumption systems for datacenter, Space Communications satellite-satellite or satellite-ground
Healthcare	Photonics for Healthcare and Well-Being	Endoscopy, Healthcare Lasers, Micro Surgery In-vitro Diagnostics and imaging, Laser-based diagnostic (OCT, Photoacoustic, Raman, 2 photons), laser based treatment systems (vision correction, dermatology, urology, ophthalmology, gynecology, etc), surgical microscopes, endoscopes
Sensors	Photonics Sensors and Monitoring Equipment	Eye Care, Smart Infrastructure (Survey, 3D Measure), Positioning, Machine Vision Technology, Optical Sensors, Remote Optical Sensors, 3D Sensing, Optical Scanners, Measurement Technology, Telecom Cable Sensors
Defense	Defense, Security	Periscope, night vision, telemetry, tachymetry, laser vibrometer, countermeasures, CBRN measurements, Camera for security & video surveillance, Laser guidance and Laser weapons



EPIC Photonics Index Universe contains about 150 public companies listed on stock markets all around the world

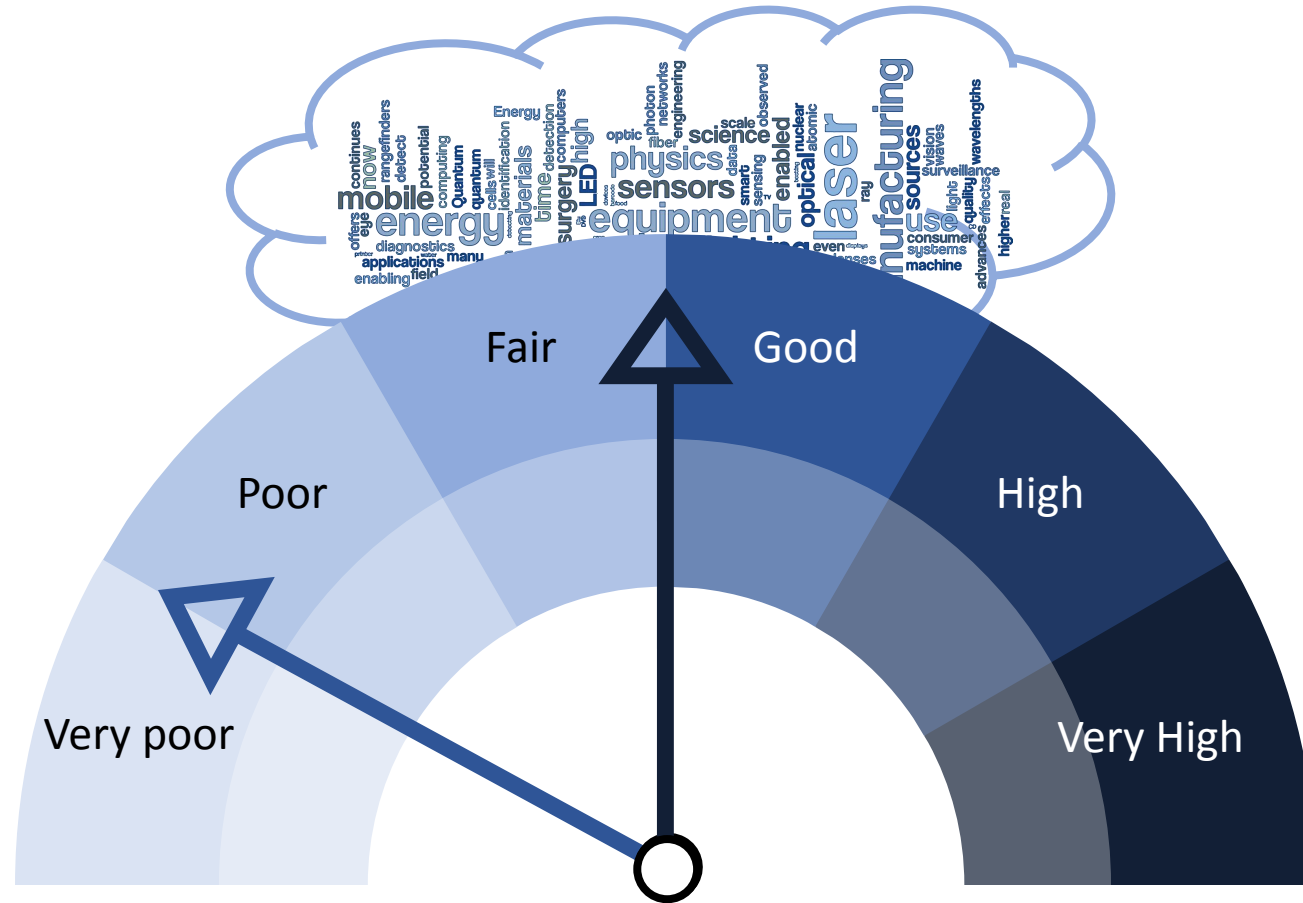
The Photonics Exposure

Key Photonics Users

Photonics Exposure
between 20% and 50%

Unconscious Users

below 20%%



Core Photonics

Photonics Exposure
above 50%

The percentage of the company revenue directly coming from photonics.

The EPIC Photonics Index Universe

Core Photonics

Photonics Exposure > 50%

Key Photonics Users

20% < Photonics Exposure < 50%

Quarterly
revision of
Photonics
Exposure



The EPIC Photonics Index Universe includes all the companies with a Photonics Exposure **above 20%**

Outside the EPIC Photonics Index Universe

Yearly revision for selected companies with $10\% < PE < 20\%$

Bi-annual revision for selected companies with $5\% < PE < 10\%$

Unconscious Users
 $0\% < \text{Photonics Exposure} < 20\%$

Systematic monitoring outside the Photonics Index Universe

Thank you for your attention

Questions?

Antonio RASPA, EPIC

