



**Scott A. Graeff, President and CEO**

*Singular Research – Best of the Uncovered Webinar*

*December 10, 2020*

# Safe Harbor

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## Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

This presentation includes information that constitutes “forward-looking statements” made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties. These statements include the company's expectations regarding its projected 2020 financial results and outlook, OptaSense's expected revenue for FYE 2021, the integration of OptaSense's employees, intellectual property and offerings, and the expected benefits of the acquisition, including the acquisition being accretive in 2021 and increasingly accretive thereafter, the ability to expand offerings to Luna's and OptaSense's customer groups, the ability to establish a strong international presence, and the ability to expand into additional high-growth markets. Management cautions the reader that these forward-looking statements are only predictions and are subject to a number of both known and unknown risks and uncertainties, and actual results, performance, and/or achievements of the company may differ materially from the future results, performance, and/or achievements expressed or implied by these forward-looking statements as a result of a number of factors. These factors include, without limitation, uncertainties regarding integration of the companies' respective employee bases, offerings and business operations, potential adverse reactions or uncertainties regarding the acquisition among the companies' customers, potential unknown liabilities and unforeseen expenses associated with the acquisition, potential performance shortfalls as a result of the diversion of management's attention caused by completing the acquisition and integrating the companies' operations, uncertainties related to the ultimate impact of the COVID-19 pandemic and those risks and uncertainties set forth in the company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 and other filings with the Securities and Exchange Commission (“SEC”). Such filings are available on the SEC's website at [www.sec.gov](http://www.sec.gov) and on the company's website at [www.lunainc.com](http://www.lunainc.com). The statements made in this presentation are based on information available to Luna as of the date of this presentation, December 10, 2020, and Luna undertakes no obligation to update any of the forward-looking statements after the date of this presentation, except as required by law.

## Adjusted Financial Measures

In addition to U.S. GAAP financial information, this presentation includes Adjusted EBITDA, a non-GAAP financial measure. This non-GAAP financial measure is in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP.

# Luna – Enabling the Future with Fiber

- **Proprietary**, measurement technology, offering **unprecedented** combination of resolution, accuracy and speed
- Customers in **attractive markets**: Military and Defense, Communications, Infrastructure, Energy and Automotive
- Positioned to **take advantage of trends** such as vehicle light-weighting and increasing demands on data centers and broadband capacity
- **Adequately capitalized** to fund growth
- Long-tenured, **experienced** executive team / board
- Corporate culture of **innovation and integrity**



# Luna is a global company



**History**  
 Incorporated 1990  
 IPO 2006



**Reporting Segments**  
 Lightwave  
 Luna Labs



**Revenue**  
 FY19 \$70.5M  
 FY20 Guidance \$81M-83M



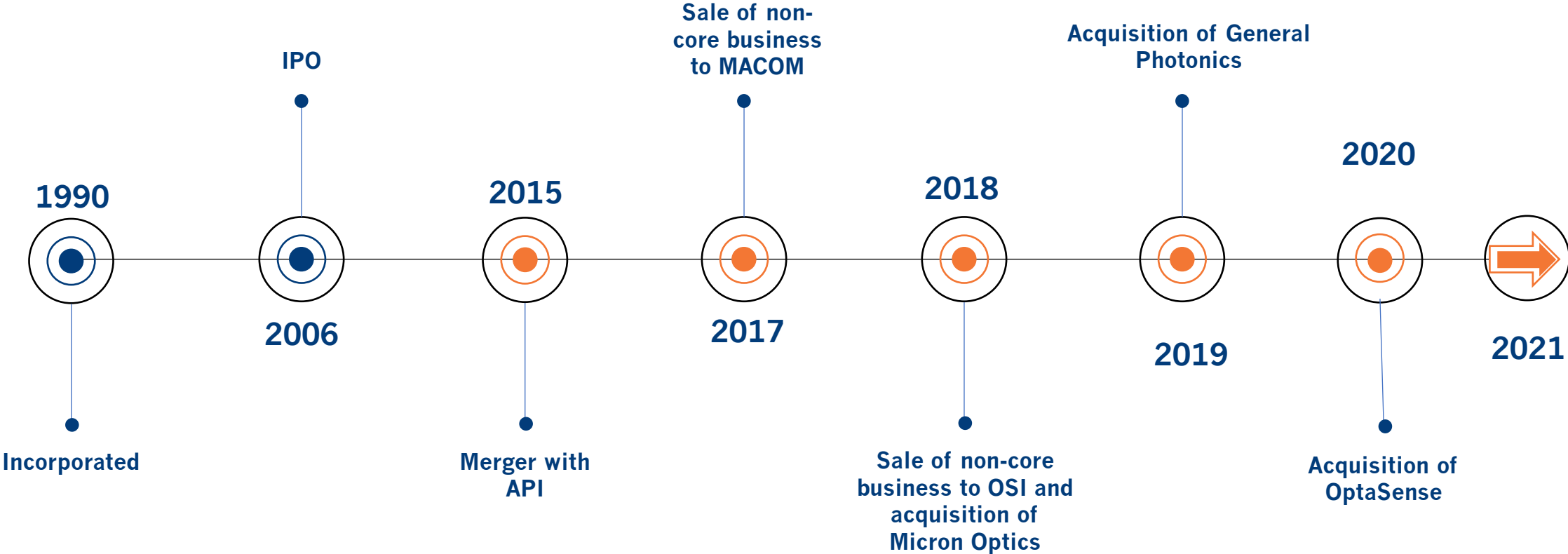
**AEBITDA**  
 FY19 \$9.5M  
 FY20 Guidance \$10M-12M

**400+ Employees**



# Luna has a clear vision and established history

## Vision: Enabling the Future with Fiber



# OptaSense Acquisition



# Summary Transaction Highlights

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- Transformative, strategic acquisition allows Luna to enhance product / solution portfolio, adding access to larger, high-growth markets
  - Adds to existing U.S. leadership position; cost-effectively establishes strong operational presence in EU & Middle East
  - OptaSense's diverse, blue-chip customer base aligns well with Luna's
  - Allows for expansion into high-growth markets such as security and perimeter detection, smart infrastructure monitoring and oil and gas; will accelerate Luna's data services and IOT strategy
  - Extensive R&D expertise and patent portfolio (over 150 patents granted or pending)
- Sign and close simultaneous; Luna Board of Director approval; no regulatory approvals required
- Acquisition expected to be accretive in 2021
- Realize efficiencies, and leverage the combination of OptaSense and Lightwave to grow rapidly our operations, customer base, offerings, and financial profile

# Compelling business model with strong growth potential

## Revenue Growth



Organic Growth:  
Mid-to High-teens

Lightwave = 18% to 20%  
Luna Labs = 6% to 8%

## Strategic M&A

Within core focus and accretive

## Margin Expansion



Gross Margin

Increase 75-100 bps annually

Operating Margin

Increase ~250 bps annually

## Shareholder Return



Cash Generation

Increasing AEBITDA

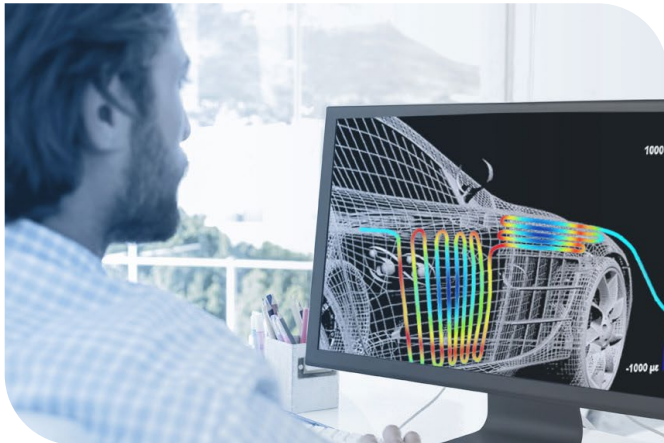
Non-GAAP EPS

Double-digit annual growth



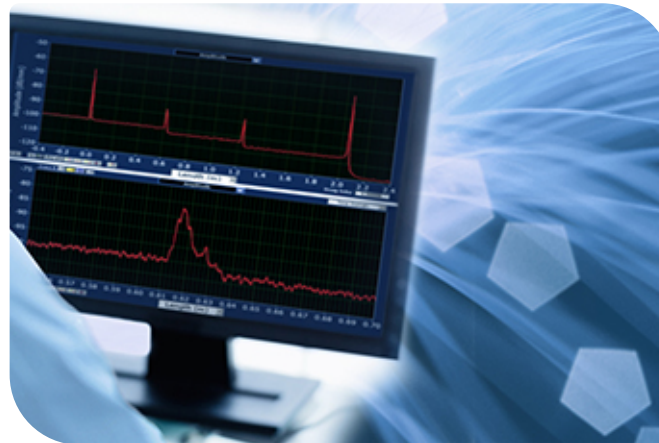
# Luna Overview

## Lightwave



### Sensing

- Long-range, continuous
- Long-range, high speed
- Short-range, high resolution
- Material thickness



### Comms Test

- Components
- Short-haul network

## Luna Labs

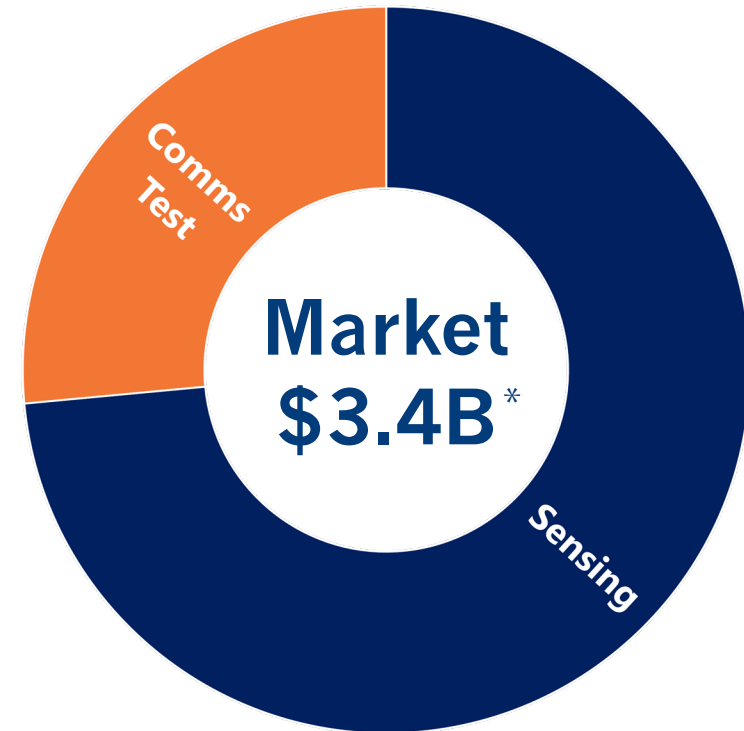


### Contract Research

- Materials
- Systems & Analytics
- Biotech

# Where Does Luna Play?

	Comms Test	Sensing
Market size*	\$900M	\$2.5B
Luna growth	15%-20%	20-25%
Drivers	5G, Silicon Photonics	Lightweighting, Smart Infrastructure, IoT
Key competition	Keysight, Viavi, Exfo	HBM, Vishay, National Instruments



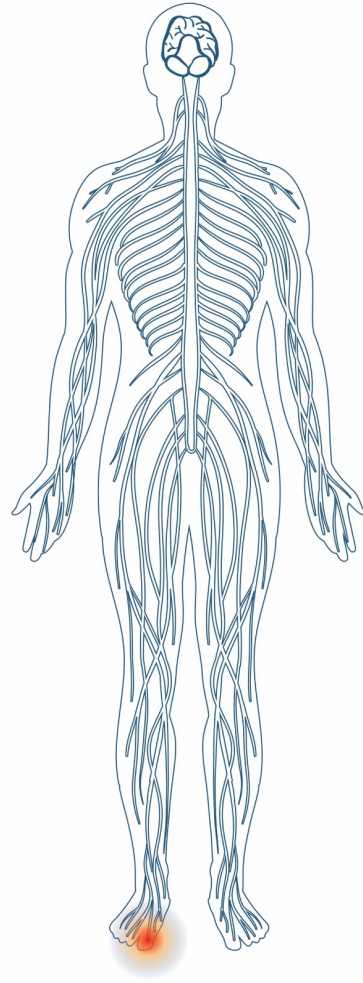
**Comms Test:**  
5G Buildout  
Field Support

**Sensing:**  
Smart Infrastructure  
Lightweighting  
Process control & NDE

\*Total SAM based on Luna estimates and published market reports

# Sensing

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- Fiber optic sensors are the “nerves” of smart materials
- Luna’s products are the “brain” that collects and aggregates data from fiber sensor “nerves”
- The new OptaSense acquisition will add missing capability to Luna’s Sensing business

# OptaSense Acquisition



# About OptaSense

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- OptaSense is a global technology leader in distributed fiber optic sensing solutions
  - Founded in 2007 as R&D group within QinetiQ, OptaSense has transformed into a vertically integrated provider of fiber optic systems
  - In 2014, QinetiQ acquired RIO, a market leading laser technology company to support and vertically integrate its manufacturing operations
  - Detects, processes, locates and identifies unique acoustic signals in real time for the monitoring and protection of critical high-value assets
- Solutions optimize customer operations by detecting, locating and classifying threats -- such as intrusions, leaks and breaches -- present in the field
- Management estimates market share within global DAS systems market to be >25%; market leadership
- Works with some of the largest names in the sectors in which it operates
- Customer concentration is relatively low with top customer = 8% / top 10 = 48% of FY20 revenue
- Diverse base of customers across broad geographies; very high customer retention rate
- Limited cross-over with Luna's existing customer base, will generate cross selling synergies

# OptaSense is organized in three business units, all of which have strong synergy with Luna's Lightwave Division

*Infrastructure and Security Monitoring (ISM) and Transport*

*Oilfield Services (OFS)*

*RIO (Lasers)*

## *End Markets*

*Pipeline Monitoring*

*Perimeter Protection*

*Border Security*

*Road Traffic Monitoring*

*Rail Track and Train Monitoring*

*Production Monitoring*

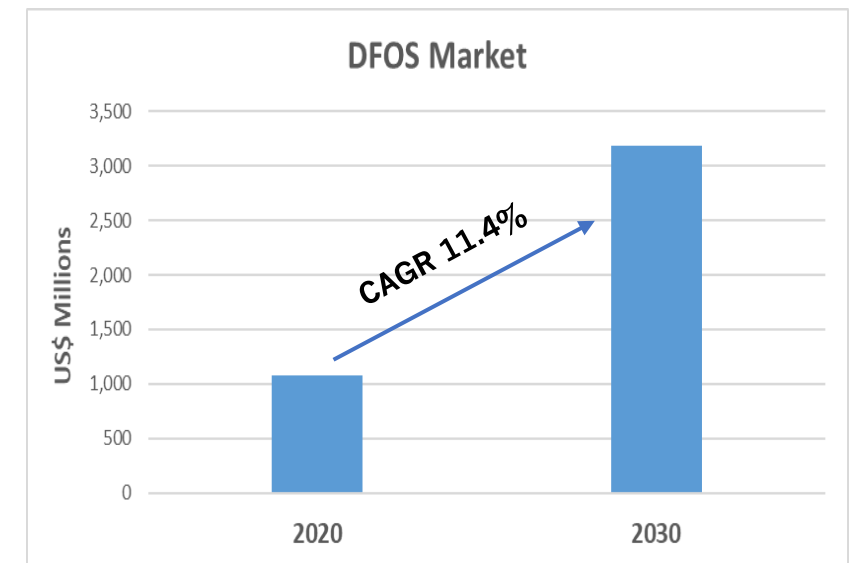
*Reservoir Monitoring*

*Other Markets (automotive, utilities, space)*

# The combination of Luna and OptaSense creates a global market leader in distributed fiber sensing (DFOS) technology

- Luna is already a global leader in fiber sensing with market leading products
  - ODiSI – short range, high resolution (fully distributed)
  - Hyperion – Long range, high speed (discrete, not distributed)
- OptaSense creates reach into broader distributed fiber sensing market DFOS market by providing fully distributed measurement capabilities over long-range applications
  - Acquisition adds significantly to Luna’s ability to penetrate and grow key target markets such as infrastructure, transportation and perimeter security
  - Adds oil and gas and pipeline monitoring markets, including the world’s largest fiber sensing-based monitoring projects
- OptaSense is the market leader in distributed acoustic sensing (DAS)
- Together, Luna & OptaSense create a new, global market leader in fiber optic sensing with diversified geographies and applications

*Long range, distributed capability adds significantly to Luna’s addressable market*



*Visiongain, February 2020*



# Sensing: long-range, continuous

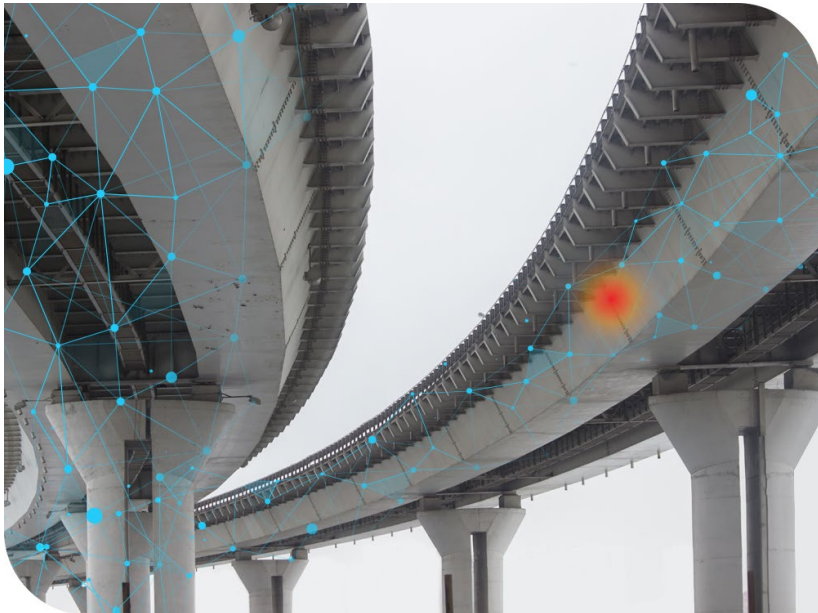
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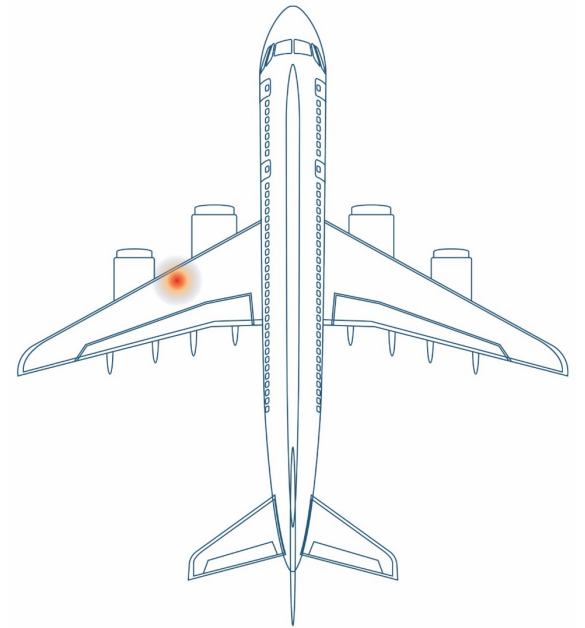
- Product: OptaSense
- Long-Range Distributed Acoustic Sensing (DAS)
  - Proprietary distributed acoustic sensing and software analytics
  - Measure acoustic signals continuously using fiber over very long lengths (50 km)
  - Markets
    - Borders, perimeter security, transportation, pipelines, oil and gas



# Sensing: long-range, high-speed

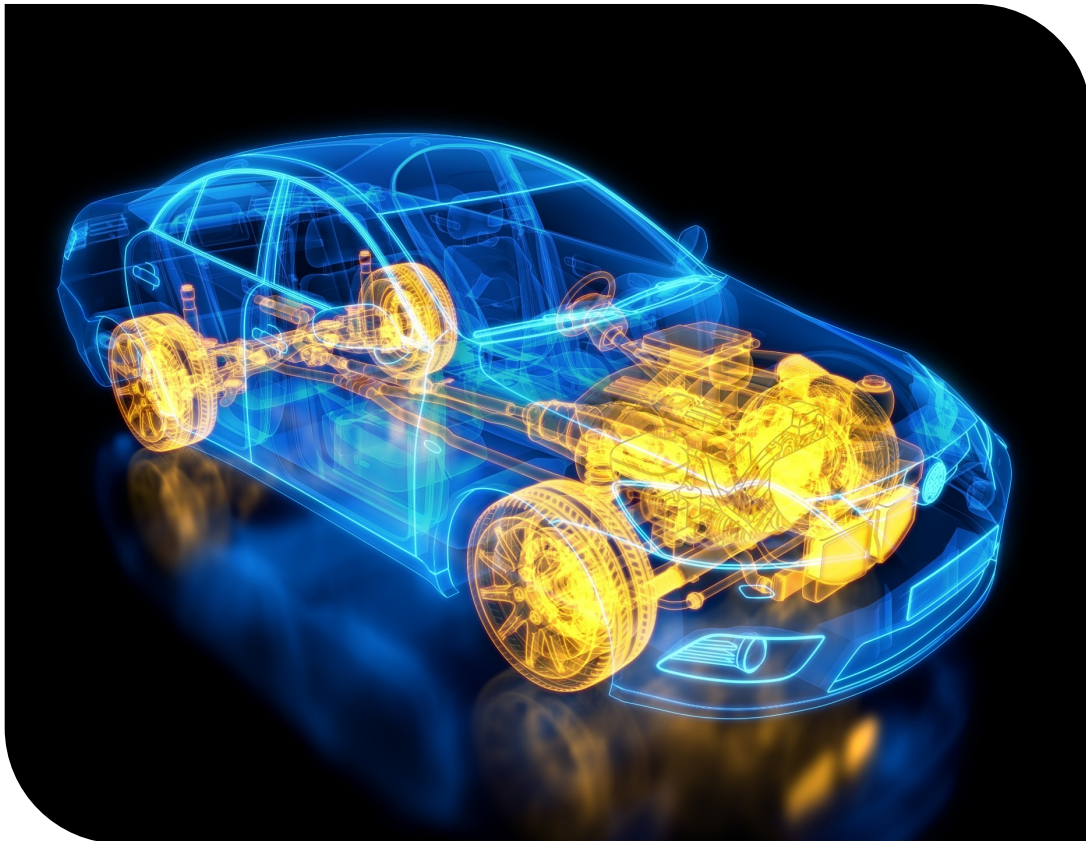


- Product: Hyperion
- High-Speed, Long-Range FBG Sensing
  - Measuring strain, temperature, acceleration, displacement and pressure
  - Focus on structural health and security
    - Buildings, tunnels, bridges
    - Perimeter security



# Sensing: Short-range, high-resolution

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- Product: ODiSI
- High-Definition Fiber Optic Sensing
  - Measuring strain and temperature in composites and other advanced materials
  - Focus on military and commercial aerospace and automotive

# Sensing: Material thickness

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- Product: Terahertz technology
- Layer thickness measurements for process control, inspection and non-destructive testing
  - Advanced technology measures thickness of opaque materials
  - Unique measurement of composites and coatings with easy to use hand-held tools
  - Focus on manufacturing environments and field test for military-aerospace
    - Plastic and industrial packaging
    - Used extensively on F35 and F22 for anti-radar surface treatment

# Comms Test

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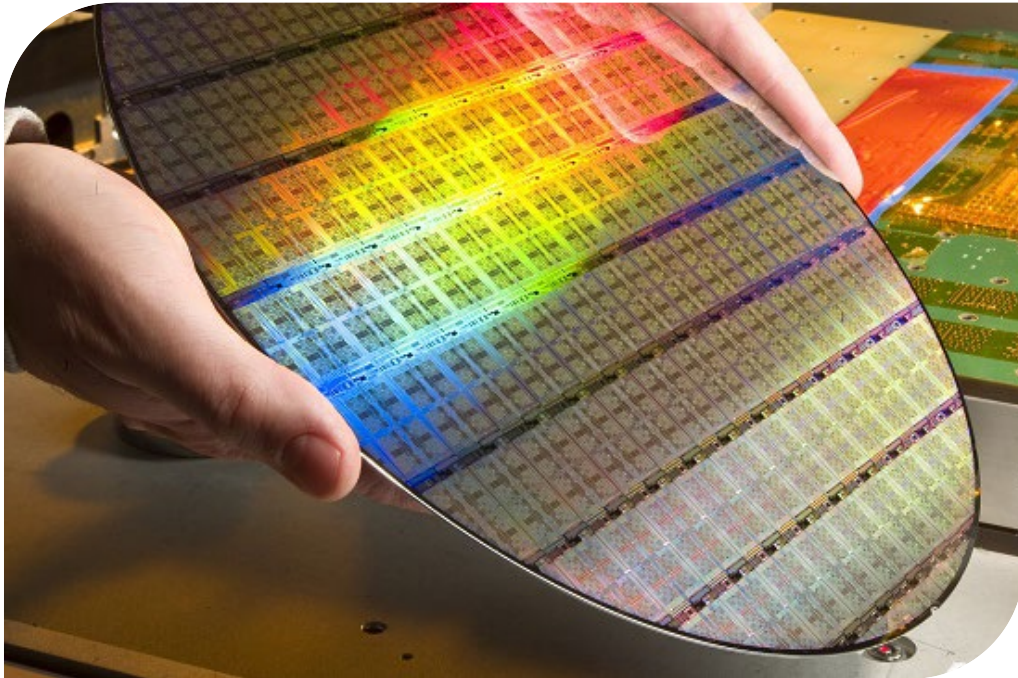


- Increased data and video consumption
  - Video forecasted to represent 82% of all IP traffic in 2022, 34% CAGR
- Growth in mobile and 4G/5G
  - Mobile data traffic growing at 46% CAGR
- Cloud services and adoption of Internet of Things
  - Data center traffic growing at 26% CAGR
  - 28.5 billion IoT networked devices by 2022



# Comms Test: Components

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- Product: Optical Vector Analyzer (OVA)
- Ensuring speed at the chip level
- Unprecedented visibility inside devices - you can't fix what you can't see
- Reduces time and cost associated with the development of high-speed optical components
- Focus on enabling the carriers to move to 5G networks

# Comms Test: Short-haul network

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- Product: Optical Backscatter Reflectometer (OBR)
- Bandwidth demands continue to drive double-digit connectivity growth
- Delivers unprecedented visibility into short-haul networks
- Emerging market for on-board aircraft communications
- Ensuring network “up time” on Lockheed Martin’s F-35



# Luna Labs

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- Work with universities and government research labs to explore technological feasibility with a goal toward proof of concept
- Collaborate with prime contractors, government offices and federally-funded R&D centers
- Work with contract manufacturers, suppliers, licensees and distributors to develop everything from small-scale prototypes up to and including market-ready products
- Based in Charlottesville, VA

# 3Q FY20 Results





# Third-quarter 2020: Key Financial Results

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- Strong financial performance:
  - \$1.4M improvement in Adjusted EBITDA<sup>1</sup> year-over-year
- Total revenues of \$21.1M; up 14% year-over-year:
  - Lightwave revenue of \$15.4M; up 17% year-over-year
  - Luna Labs revenue of \$5.7M; up 8% year-over-year
- Operating income improved to \$2.3M, or 11% of total revenues, in Q3 2020 from \$1.5M, or 8% of total revenues, in Q3 2020 due to increased revenue and gross profit as well as improved operating expense leverage
- Net income of \$3.1M, or \$0.10 per fully diluted share, for the three months ended September 30, 2020, compared to \$1.2M, or \$0.04 per fully diluted share, for the three months ended September 30, 2019
- Adjusted EBITDA<sup>1</sup> increased to \$4.3M for the three months ended September 30, 2020, compared to \$2.9M for the three months ended September 30, 2019
- Reaffirmed 2020 outlook - \$81 to \$83M in total revenues and \$10 to \$12M in Adjusted EBITDA

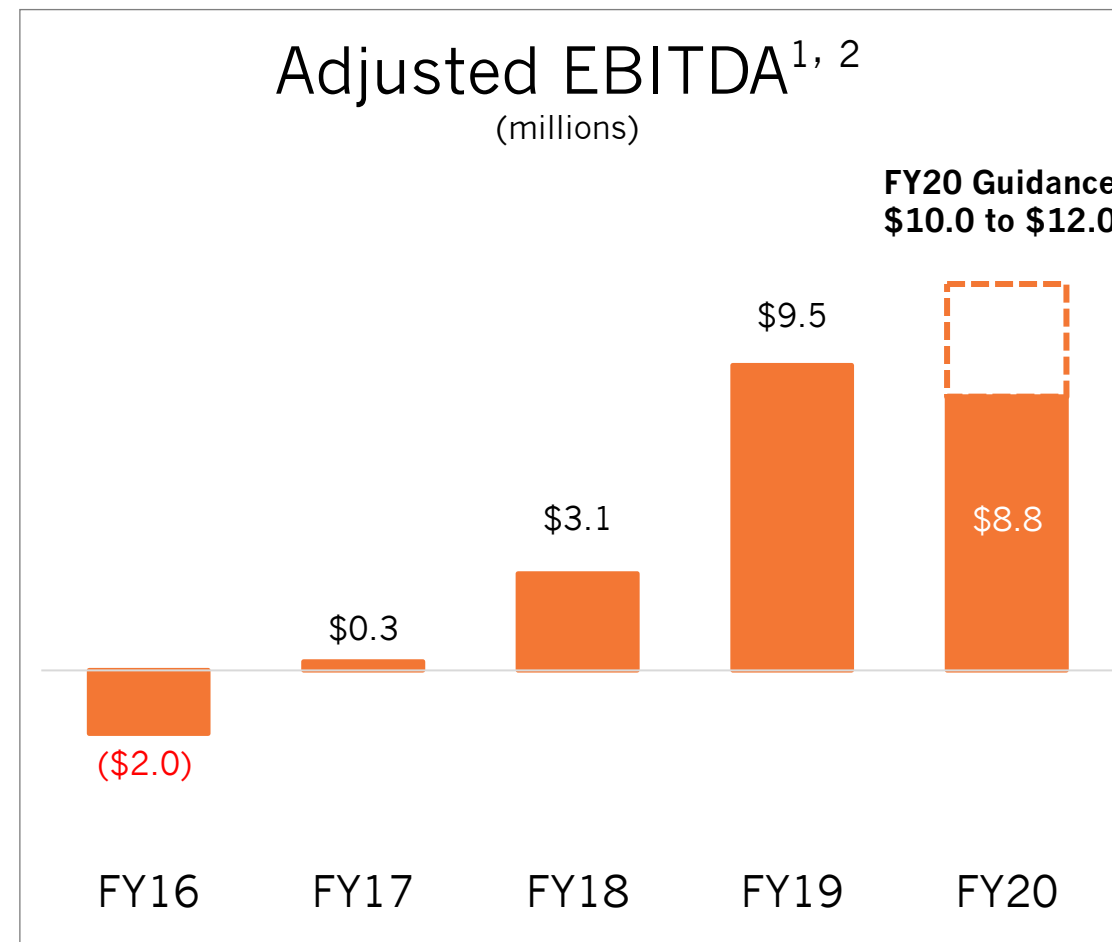
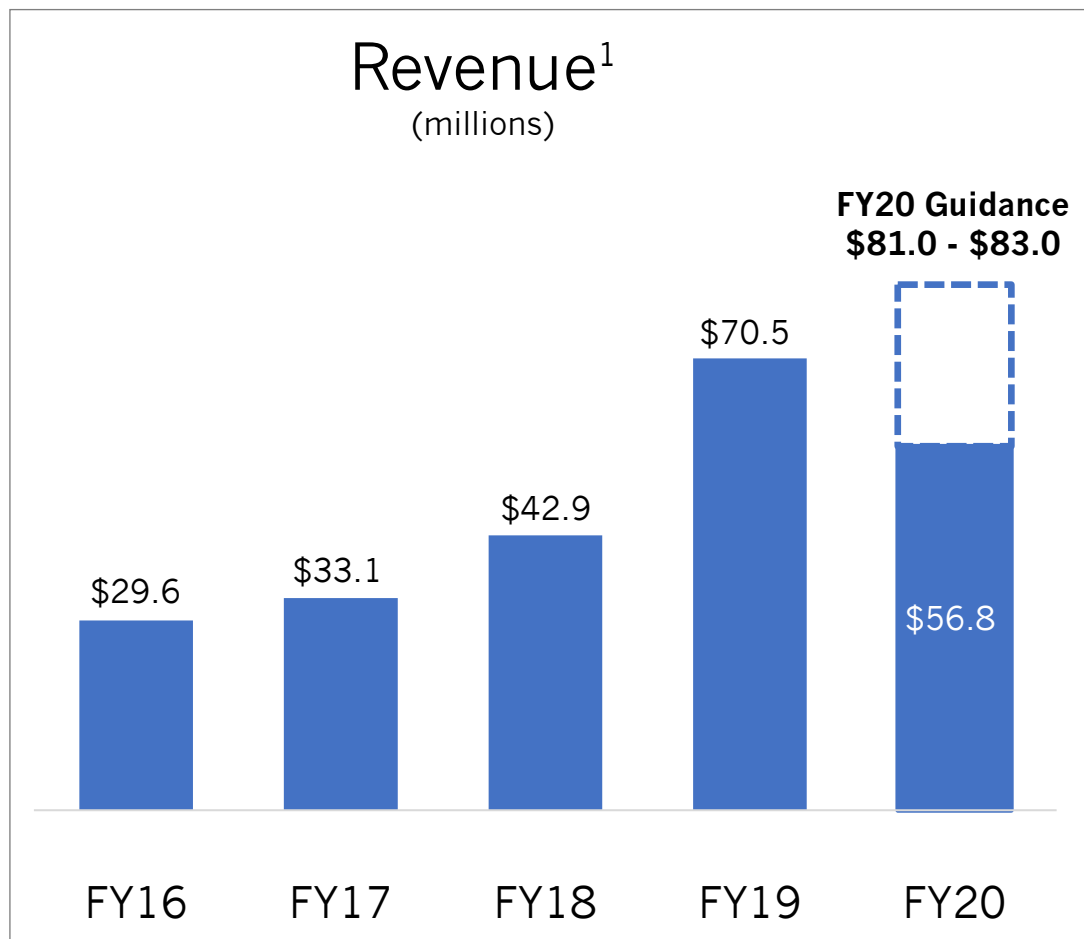
<sup>1</sup>Adj EBITDA is a non-GAAP measure. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the appendix to this presentation.

# Third-quarter 2020 and Other Recent Accomplishments

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- Reported strong third-quarter 2020 financial results in challenging COVID environment
- Acquired New Ridge Technologies
  - Brings advanced measurement capabilities to our communications test portfolio
- Hired key positions in operations and corporate shared services
- Held 9 customer-facing technology educational webinars: ~1,300 live attendees and more than 1,400 leads
- Progressing towards NetSuite go-live in Q1 2021
- Continued to monitor employee feedback with a focus on safety and well-being
- Consolidated Luna Labs facility footprint to increase division efficiency and drive collaboration and growth
- Selected by Lockheed Martin as the supplier of corrosion sensors for NASA's Artemis mission

# Strong Financial Results



<sup>1</sup> Based on management's estimates of the impact from the divestiture of Optoelectronics. Includes the acquisitions of Micron Optics and General Photonics.

<sup>2</sup> Adj EBITDA is a non-GAAP measure. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the appendix to this presentation.

# A Flexible Balance Sheet and Strong Cash Position

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- Strong balance sheet on September 30, 2020:
  - \$95.9M in total assets
    - \$26.4M in cash and cash equivalents
    - \$49.3M in working capital
- Continued focus on working capital and reinvestment in business in order to generate long-term sustainable growth

# Optasense Financing Details – subsequent to 3Q2020 results

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- Announced debt financing simultaneous with the announcement of the acquisition of Optasense
- Two separate financing vehicles; a term facility and a revolver facility:
- The term facility:
  - \$12.5 million, 3-year term loan, LIBOR plus 1.75-2.25% based on Net Leverage Ratio
- The revolver:
  - \$15 million, 3-year, LIBOR plus 1.75-2.25% based on Net Leverage Ratio

# 2020 Financial Outlook

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- Maintaining FY2020 outlook:
  - Total revenues of \$81M to \$83M
  - Adjusted EBITDA<sup>1</sup> of \$10M to \$12M

<sup>1</sup> Adj EBITDA is a non-GAAP measure. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the appendix to this presentation. The outlook above does not include any future acquisitions, divestitures, or unanticipated events.

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# Appendix





# Reconciliation of Net Income to Adjusted EBITDA

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2020	2019	2020	2019
	(Unaudited)		(Unaudited)	
<b>Reconciliation of EBITDA and Adjusted EBITDA</b>				
Net income	\$ 3,102	\$ 1,230	\$ 3,355	\$ 3,196
Loss from discontinued operations, net of income tax benefit of \$464	-	-	1,436	-
<b>Net income from continuing operations</b>	<b>3,102</b>	<b>1,230</b>	<b>4,791</b>	<b>3,196</b>
Interest expense	1	4	2	15
Investment income	(1)	(76)	(65)	(324)
Income tax expense/(benefit)	(836)	325	(257)	(1,293)
Depreciation and amortization	762	669	2,126	1,835
<b>EBITDA</b>	<b>3,028</b>	<b>2,152</b>	<b>6,597</b>	<b>3,429</b>
Share-based compensation	571	420	1,538	1,140
Non-Recurring Charges (1)	696	-	696	942
CFO Severance	(28)	-	(28)	-
Amortization of Inventory Step-up	-	311	-	725
<b>Adjusted EBITDA</b>	<b>\$ 4,267</b>	<b>\$ 2,883</b>	<b>\$ 8,803</b>	<b>\$ 6,236</b>

(1) Non-recurring charges consist of the following: 2020) footprint consolidation 2019) transaction expenses related to the acquisition of General Photonics.

# Reconciliation of Net Income to Adjusted EBITDA: Full Year

	Year Ended December 31,			
	(unaudited)			
	2016	2017	2018	2019
<b>Reconciliation of EBITDA and Adjusted EBITDA</b>				
Net (loss)/income	\$ (2,370)	\$ 14,615	\$ 11,004	\$ 5,343
Less: income from discontinued operations, net of income taxes	300	15,866	9,766	-
<b>Net income from continuing operations</b>	<b>(2,670)</b>	<b>(1,251)</b>	<b>1,238</b>	<b>5,343</b>
Interest expense	319	217	124	16
Investment income	-	-	(549)	(394)
Income tax (benefit)/expense	(135)	(1,148)	48	(1,654)
Depreciation and amortization	1,466	1,137	908	2,503
<b>EBITDA</b>	<b>(1,020)</b>	<b>(1,045)</b>	<b>1,769</b>	<b>5,814</b>
Share-based compensation	860	715	628	1,544
Non-Recurring Charges (1)	-	596	751	1,390
Amortization of Inventory Step-up	-	-	-	725
<b>Adjusted EBITDA</b>	<b>\$ (160)</b>	<b>\$ 266</b>	<b>\$ 3,148</b>	<b>\$ 9,473</b>

(1) Non-recurring charges consist of the following: 2020) footprint consolidation 2019) transaction expenses related to the acquisition of General Photonics.

# New Segment Quarterly Results

	(in thousands)					
	Three Months Ended					
	June 30, 2019	September 30, 2019 <sup>A</sup>	December 31, 2019	March 31, 2020	June 30, 2020	September 30, 2020
Revenues:						
Lightwave	\$ 12,523	\$ 13,088	\$ 13,988	\$ 11,554	\$ 12,933	\$ 15,350
Luna Labs	5,291	5,301	5,492	5,587	5,642	5,700
Total revenues	<u>17,814</u>	<u>18,389</u>	<u>19,480</u>	<u>17,141</u>	<u>18,576</u>	<u>21,050</u>
Cost of revenues:						
Lightwave	5,334	5,449	5,070	4,885	5,181	5,670
Luna Labs	3,728	3,665	4,022	3,892	3,878	4,431
Total cost of revenues	<u>9,062</u>	<u>9,114</u>	<u>9,092</u>	<u>8,777</u>	<u>9,059</u>	<u>10,101</u>
Gross Profit	<u>8,752</u>	<u>9,275</u>	<u>10,388</u>	<u>8,364</u>	<u>9,517</u>	<u>10,949</u>
Operating expense:						
Selling, general and administrative	6,003	5,745	6,416	6,377	6,202	6,505
Research, development and engineering	1,735	2,048	2,255	1,597	1,505	1,616
Loss on sale of property and equipment	-	-	-	-	-	576
Total operating expense	<u>7,738</u>	<u>7,793</u>	<u>8,671</u>	<u>7,974</u>	<u>7,707</u>	<u>8,697</u>
Operating income	<u>\$ 1,014</u>	<u>\$ 1,482</u>	<u>\$ 1,717</u>	<u>\$ 390</u>	<u>\$ 1,810</u>	<u>\$ 2,252</u>

<sup>A</sup> The Company revised its results for the three months ended September 30, 2019. The Company has concluded these adjustments are not material individually or in the aggregate.