# KEYENCE CORPORATE PROFILE





01

[Introduction]

### A Leader in Sensing Technology since 1974

#### Who We Are

KEYENCE has steadily grown since 1974 to become a worldwide leader in the development and manufacture of sensing equipment ranging from automation sensors, measuring instruments, and visions systems to laser markers and digital microscopes.

Our innovative products not only meet the current but also future customer requirements in many manufacturing and research industries.

At KEYENCE we strive to anticipate the market's future needs to provide tomorrow's solution today.

At KEYENCE, we are not content to merely have the best products on the market, we also provide our customers with the most knowledgeable and trained sales professionals in the industry. We are dedicated to supporting the customer's mission of becoming the leader of their respective industry.

KEYENCE, a blue chip company, has been recognized by many prominent organizations. Most recently, we were ranked 17th on Forbes' "World's Most Innovative Companies" list. We have also been named one of Business Week's "1000 Best Valued Companies," and are consistently ranked ahead of companies like Sony and Honda Motors in Japan's Nikkei newspaper's annual ranking of the "Top Ten Excellent Companies in Japan."

Today, KEYENCE serves over 200,000 customers in some 70 countries around the world, where its name stands for innovation and excellence.

### **Direct Approach**

KEYENCE employs a large number of sales engineers throughout the world enabling invaluable direct on-site support.

With this direct approach we are able to meet the customer's needs at every level of their business, from the design and research stage to the production line and beyond.

These highly trained sales engineers are problem solvers who can provide real solutions to the customers' applications with existing products or potential new solutions.

#### Superior Technology

KEYENCE is a worldwide leader in innovating and supplying the most cuttingedge and highest quality automation and manufacturing technologies. New product sales consistently account for 30% of KEYENCE's total sales, illustrating our ability to develop new products and quickly respond to customer needs.

### **Versatile Products**

KEYENCE manufactures a broad range of products, from photoelectric and proximity sensors to measuring instruments for inspection lines and high precision devices used in research institutes. These products are used across all industry sectors.

### **Worldwide Logistics**

Products are shipped on the same day as the order is received from warehouse centres located in over 44 countries throughout the world ensuring quick delivery.



Product Development
At KEYENCE, terms like "World's First," "World's Fastest," "Industry First," and "Best in Class" come standard with our products.

[ Development ]

## Developing Industry Leading Products through Intense In-house Research and Development

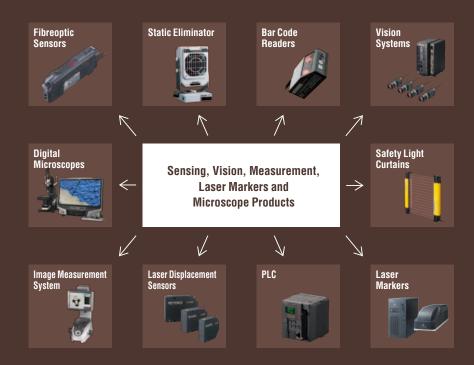
KEYENCE products are designed to add value to the manufacturing and research practices of our customers.

Our products are engineered to be versatile, so they can be used in every industry and a wide variety of applications. KEYENCE offers the worlds best products for today and tomorrow's application needs.

At KEYENCE, terms like "World's First," "World's Fastest," "Industry First," and "Best in Class" come standard with our products.

With over 40 years of direct, on-site problem solving experience we know the industries we serve better than other companies in the industry enabling us to provide optimal solutions.

### Products for Manufacturing and Research and Development





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[ Products 01]

## Sensing, Measurement and Microscope Products

Customers in a wide variety of industries and manufacturing environments use our versatile sensors to detect the presence or absence of an entire part or just a particular feature of that part.

Our measurement products are used to

determine the size or magnitude of a particular part or feature with unbeatable accuracy.

Our revolutionary digital microscopes provide unparalleled depth of field and near SEM resolution at a far lower cost.

### **Fibreoptic Sensors**

Certainty and Simplicity

- •Complete Setting in Just One Click
- ·Automatic Maintenance
- •High Power Reduces Labour Hours
- •Beam 250x Conventional Model [World's Most Powerful]
- •Detects Wire as Small as ø0.6µm [World's Most Accurate]
- •Ambient-Light Resistance: 30,000 Lux [World's Highest]



### **Laser Displacement Sensor**

High-Speed, High-Accuracy CMOS Laser Displacement Sensors

- •Sampling Speed of 392 kHz [World's Fastest]
- •Accuracy of ±0.02% [Industry Best]
- •Resolution of 0.01 $\mu$ m [Best-in-Class]
- •Multifunctional Controller with Simple, Menu-driven software
- •Connect up to 12 Sensor Heads / Network Capable



### LK Series

### **Image Dimension Measurement System**

A Breakthrough in Dimensional Measurement

- Measure the Previously Unmeasurable
- Sub-Pixel Measurement Accuracy
- Instantaneous Batch Measurements at 99 Points
- Positioning is no Longer Necessary



IM Series

### **Digital Microscope**

High resolution images, 3D profiles, and superior depth of field

- •Real-time 2D/3D Image Stitching [World's First]
- •3D Display Function [Fastest in the Industry]
- •Quick Depth Composition [Fastest in the Industry]
- •Lighting Optimisation [First in the Industry]
- •Contrast Optimisation [First in the Industry]
- •High Dynamic Range Function (HDR)
- •Automatic Lens/Magnification Recognition Function: DOUBLE'R [First in the Industry]

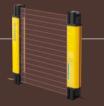


VHX Series

### **Safety Light Curtain**

Heavy-duty, No Dead Zone

- ·Visible/Identifiable Indicator
- •Edge-to-Edge Detection Zone
- •State Information Output
- •Tough, Water-Proof Model
- •All-in-One Built-in Controller



SL Series



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[ Products 02]

### Vision Systems, Laser Markers and Barcode Reader Products

Our industry leading vision systems enable our customers to accurately and instantaneously perform quality control inspections that are too complicated for ordinary sensors or previous vision systems.

KEYENCE laser markers are unmatched in their performance including the world's

first 3D laser marker. They use a high intensity laser to permanently and accurately mark shapes or characters onto surfaces such as metals or plastics at incredibly high speeds.

To scan/decode barcodes KEYENCE has developed the fastest digital barcode reader.

### **Machine Vision**

Ultra-High-Speed, Multi-camera Universal Machine Vision System

- •11x High-Speed, 5 Million-Pixel Camera [Fastest in its Class]
- •3+1 Processor System: Ultra-High-Speed, Parallel Processing
  •Multiple Camera Types
- •Wide Array of Inspection Tools [Most Extensive in its Class]



CV Series

### **Laser Marker**

High Speed 3-Axis Laser Markers

- Fibre, CO2 and YVO4 Laser Marker Types
- Ultra-Small Fanless Marking Head [World's Smallest]
- 3-Axis Laser Marking [World's First]
- 42-mm Variable Focal Length [World's First]
- Variable Spot Size [World's First]
- High-Speed 30 W Output [Best in its Class]

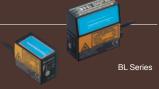


MD/ML Series

### **Barcode Reader**

Ultra-Compact Digital Barcode Readers

- •Decoding Speed (1300/sec) [Highest in its Class]
- Quick Calibration without a PC [World's First]Parallel digital processing [First in its Class]
- •Noise and Compensation Functions
- Noise and Compensation Functions
   High-Resolution and Long-Range Models



### **Static Eliminator**

High-speed/Wide area static eliminator

- •2x the elimination area as previous models
- •2x the elimination speed as previous models
- $\mbox{-}\mbox{Automatic sensing}$  and feedback functions using the I.C.C. method
- •Connect 5 blowers to a single controller [World's First]



SJ Series

### **PLC**

Ultra-high Speed Network Enabled

- •Network: Built-in Ethernet/FL-net Function
- Ultra-high Speed: KV VELOCE (II) Execution Engine Enables 60k-step Ladder Execution in 1ms.
- •Memory: Large Capacity SDRAM
- •KV Script: Program Formulas or Characters Strings Directly



KV Series





## Dedicated to Adding Value for Our Customers

### **Direct Approach**

Our technically trained sales engineers have extensive product knowledge along with application and industry experience. Customers can expect on-site support to quickly solve applications saving invaluable time.

### **KEYENCE Direct Sales System**



### **Conventional Sales Style**



### **Fast Delivery**

KEYENCE has established a fast delivery system to deliver required products whenever necessary. Products are shipped from warehouse centres in Japan, Singapore, Malaysia, India, Thailand, China, Taiwan, South Korea, U.S., Mexico, Canada, Brazil, the U.K., Germany, France, Belgium and Italy as well as many other locations worldwide.



### Comprehensive Support

KEYENCE supports customers with extensive on-site manufacturing and automation knowledge. This includes comprehensive support from model selection to line operation with on-site operating instructions and precautions after product adoption.





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[Global Reach]

### Global Support: Over 200 Offices in more than 44 Countries

In the over 40 years since its inception in Japan in 1974 the KEYENCE Corporation has flourished into a global leader in industrial automation technologies, rapidly expanding into an efficient global



network of 17 international organisations with over 200 offices in more than 44 countries.

Worldwide companies ranging from the largest Fortune 500 manufactur-

ers to niche suppliers have come to rely upon KEYENCE to offer solutions that improve the quality and efficiency of their automated manufacturing.

KEYENCE offers the many benefits of our Direct Sales network throughout the world. Our highly trained personnel can benefit your factories or support your arriving equipment in worldwide locations.

By offering the most innovative solutions, KEYENCE provides the tools manufac-



turers need to stay competitive in the global marketplace.

### Ready to Provide Solutions Worldwide:





3M, Airbus, Apple, Applied Materials, AUO, BASF, Bayer, BMW, Boeing, Bosch, Bridgestone, BYD, Canon, Caterpillar, CMO, Continental AG, Corning, Cray, DAIMLER, Denso, du Pont, Dunlop, Energizer, Ericsson, Exxon Mobil, Fiat, Ford, Foxconn, GE, General Dynamics, Gillette, GM, Goodyear, Hitachi, Honda, Honeywell, Hyundai, IBM, Intel, Johnson & Johnson, Kraft Foods, LG Electronics, Michelin, Mitsubishi, Motorola, NEC, Nissan, P&G, Panasonic, Peugeot, Pfizer, Philips, Pirelli, Porsche, Q-Cells, Renault, Saab, Samsung, Sharp, Siemens, Singer, Sony, Suntech, Toshiba, Toyota, Unilever, United Technologies, Volkswagen, Westinghouse, YKK

Some R&D institutes/universities:

- and many more throughout the world.

AIST(Advanced Industrial Science and Technology), Fraunhofer Institute, Goethe University Frankfurt, Japan Aerospace Exploration Agency, Kyoto University, Lawrence Livermore National Laboratory, Max Planck Institute, MIT Lincoln Laboratory, NASA, Oak Ridge National Laboratory, RIKEN, Texas A&M, Tokyo University, University Berlin, University Munich, University Stuttgart, Yale



### **Company Data**

### **Facts**

Global Headquarters: Osaka, Japan

Founded: May 1974 Capital: \$300,362,000 USD

2013 Global Sales: \$2,598,137,000 USD Worldwide Employees: 4,000

Note: Dollar amounts are translated from Japanese yen, for convenience only, at ¥102 = US\$1, the approximate exchange rate on March 20, 2014.

### **An Exceptional Company**

KEYENCE has been recognised by many prominent organisations. Most recently, we were ranked 17th on Forbes' "World's Most Innovate Companies" list. We have also been named one of Business Week's "1000 Best Valued Companies," and are consistently ranked ahead of companies like Sony and Honda Motors in Japan's Nikkei newspaper's annual ranking of the "Top Ten Excellent Companies in Japan."

#### Forbes' World's Most Innovate Companies

1	Salesforce.com
2	Amazon.com
3	Intuitive Surgica
4	Tencent Holdings
5	Apple
:	:
7	Google
:	:
17	KEYENCE
18	FMC Technologies
19	Starbucks
20	Nintanda

As of 2011

### Newsweek Electronics Industry Ranking

,					
1	IBM	:	:		
2	HP	16	Xerox		
3	CANON INC.	:	:		
4	Panasonic	26	Seagate		
5	Apple INC.	:	:		
6	ABB	39	KEYENCE		
7	DELL		:		
8	Schneider Electric	42	Rockwell Automation		
9	Emerson Electric	43	Cooper Industries		
10	Sony	:	:		

### **CLEAN Energy Policy**

KEYENCE recognises that protecting our environment is of paramount importance to the whole planet. We strive to make our contribution to the protection and improvement of the global environment through our value added solutions which enable a wide range of industries to produce goods efficiently with little waste and minimise the impact to the environment.

### History

1974 –	Incorporated as Lead Electric Co., Ltd.
1975 –	Developed high accuracy proximity sensor
1983 –	Developed optical fibre photoelectric sensor
1986 -	Developed the first photoelectric sensor to utilise a laser diode as the light source
1986 –	Renamed KEYENCE Corporation, from "KEY of sciENCE"
1989 -	Developed ultra compact barcode reader
1990 –	Developed microscope with built-in monitor
1995 –	Developed world's smallest machine vision system
1999 –	Developed world's first auto focus colour laser microscope
2000 -	Developed world's first digital focus on a microscope
2002 -	Developed high speed/high accuracy machine vision system
2004 -	Developed industry fastest application PLC
2005 -	Developed next generation 3D real surface digital microscope
2006 -	Developed world's first 3D laser marker
2007 -	Developed world's first CMOS laser sensor
2008 -	Developed industry's first microscope with high-speed magnified video capture capabilities.
2009 -	Developed high power fibre laser marker with the world's smallest head size Developed world's first ø2 mm micro-head Spectral-Interference Laser Displacement Meter
	Developed new high speed, accurate image dimension measurement system
2010 -	Developed Ultra-high speed and high capacity multi-camera image processing system.
2011 -	Developed Rapid set-up vision sensor
2012 -	Developed auto-teaching machine vision system
2013 -	Developed world's fastest 2D/3D laser scanner with 64,000 profiles/sec

### **RoHS**

sampling

Since April 2005 KEYENCE has been progressively eliminating hazardous substances from our products and implementing the switch to RoHS compliant products.

#### WEEE

KEYENCE's recycling scheme is based on the WEEE directive.

### **KEYENCE**

### www.keyence.com

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For other countries, please visit: www.keyence.com