+357 96 030922
info@marketpublishers.com

Global Collaborative Robot Encoders Market 2026 by Manufacturers, Regions, Type and Application, Forecast to 2032

https://marketpublishers.com/r/GDEF74CBFC46EN.html
Date: January 2026
Pages: 142
Price: US$ 3,480.00 (Single User License)
ID: GDEF74CBFC46EN

Abstracts

According to our (Global Info Research) latest study, the global Collaborative Robot Encoders market size was valued at US$ 71.17 million in 2025 and is forecast to a readjusted size of US$ 234 million by 2032 with a CAGR of 18.4% during review period.

A collaborative robot encoder is a precision sensor used to measure joint position, speed, and direction in collaborative robots. It is a key component enabling high-precision motion control, safe human–robot interaction, collision detection, hand-guiding, and repeatability. Compared with conventional industrial robot encoders, cobot encoders emphasize high resolution, low latency, functional safety (SIL2/PLd), and redundant feedback. In 2025, global collaborative robot encoder production reached approximately 706.6 K Units. Upstream materials include optical gratings, LEDs, photodiodes, magnetic chips, ASICs, precision bearings, and housings. Downstream customers are collaborative robot OEMs and automation integrators including Universal Robots, KUKA, ABB, JAKA, AUBO, and Elite, serving electronics, automotive, new energy, medical, and research industries.

The collaborative robot encoder market is expanding rapidly in line with the strong growth of collaborative robots. The demand is shifting from incremental encoders toward absolute, safety-certified, and redundant architectures. Magnetic and inductive encoders are gaining share due to robustness and compactness, while optical encoders remain dominant in high-precision joints.

This report is a detailed and comprehensive analysis for global Collaborative Robot Encoders market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is

+357 96 030922
info@marketpublishers.com

constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2025, are provided.

Key Features:

Global Collaborative Robot Encoders market size and forecasts, in consumption value ($ Million), sales quantity (K Units), and average selling prices (US$/Unit), 2021-2032

Global Collaborative Robot Encoders market size and forecasts by region and country, in consumption value ($ Million), sales quantity (K Units), and average selling prices (US$/Unit), 2021-2032

Global Collaborative Robot Encoders market size and forecasts, by Type and by Application, in consumption value ($ Million), sales quantity (K Units), and average selling prices (US$/Unit), 2021-2032

Global Collaborative Robot Encoders market shares of main players, shipments in revenue ($ Million), sales quantity (K Units), and ASP (US$/Unit), 2021-2026

The Primary Objectives in This Report Are:
To determine the size of the total market opportunity of global and key countries
To assess the growth potential for Collaborative Robot Encoders
To forecast future growth in each product and end-use market
To assess competitive factors affecting the marketplace

This report profiles key players in the global Collaborative Robot Encoders market based on the following parameters - company overview, sales quantity, revenue, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Heidenhain, Dynapar, Tamagawa, Baumer, Pepperl+Fuchs, Renishaw, Avago Technologies (Broadcom), Sensata Technologies, Bourns, Balluff, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Market Segmentation

+357 96 030922
info@marketpublishers.com

Collaborative Robot Encoders market is split by Type and by Application. For the period 2021-2032, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type

Incremental

Absolute

Market segment by Sensing Principle

Optical Encoder

Magnetic Encoder

Inductive Encoder

Capacitive Encoder

Market segment by Mounting

In-joint

Motor Feedback

External Redundant

Market segment by Functional Safety

Non-safety

SIL1 / PLc

SIL2 / PLd

+357 96 030922
info@marketpublishers.com

SIL3 / PLe

Market segment by Application

Micro-load Cobot: ?3 kg

Light-load Cobot: 3–7 kg

Medium-load Cobot: 7–15 kg

Heavy-load Cobot: ?15 kg

Major players covered

Heidenhain

Dynapar

Tamagawa

Baumer

Pepperl+Fuchs

Renishaw

Avago Technologies (Broadcom)

Sensata Technologies

Bourns

Balluff

TE Connectivity

+357 96 030922
info@marketpublishers.com

Kubler

TR-Electronic

Hutchinson

Netzer Precision

Rozum Robotics

Lika Electronics

Celera Motion

BEI Sensors

Market segment by region, regional analysis covers
North America (United States, Canada, and Mexico)
Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)
Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)
South America (Brazil, Argentina, Colombia, and Rest of South America)
Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Collaborative Robot Encoders product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Collaborative Robot Encoders, with price, sales quantity, revenue, and global market share of Collaborative Robot Encoders from 2021 to 2026.

Chapter 3, the Collaborative Robot Encoders competitive situation, sales quantity, revenue, and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Collaborative Robot Encoders breakdown data are shown at the regional

+357 96 030922
info@marketpublishers.com

level, to show the sales quantity, consumption value, and growth by regions, from 2021 to 2032.

Chapter 5 and 6, to segment the sales by Type and by Application, with sales market share and growth rate by Type, by Application, from 2021 to 2032.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value, and market share for key countries in the world, from 2021 to 2026.and Collaborative Robot Encoders market forecast, by regions, by Type, and by Application, with sales and revenue, from 2027 to 2032.

Chapter 12, market dynamics, drivers, restraints, trends, and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Collaborative Robot Encoders.

Chapter 14 and 15, to describe Collaborative Robot Encoders sales channel, distributors, customers, research findings and conclusion.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Collaborative Robot Encoders Market 2026 by Manufacturers, Regions, Type and Application, Forecast to 2032

Product link: https://marketpublishers.com/r/GDEF74CBFC46EN.html

Price: US$ 3,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/GDEF74CBFC46EN.html