OEM AUTOMATIC

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iNSPO

COMPUTER VISION

BLAZE TOF CAMERA
FROM BASLER

SIMPLE WAY OF 3D PICKING
FROM PHOTONEO

NEW GENERATION 3D LASER TRIANGULATION
FROM SMARTRAY

IMAGING & VISION CHANGES NAME TO

COMPUTER VISION

Photoneo

Real-time colorful point clouds

MOTIONCAM-3D COLOR

Photoneo MotionCam-3D is a 3D camera with high resolution and high accuracy for dynamic scenes. The scanner gives you accurate point clouds in a high level of detail without compromising quality or being disturbed by vibrations, ambient light or motion blur. This makes MotionCam-3D the perfect 3D scanner for handling objects in motion. With the Color add-on, you also get access to color information in the point cloud.

MOTIONCAM-3D - NOW IN COLOR

With this camera, you can get colorful 3D point clouds and 3D models of literally any object in real time – whether it's large containers, small components or people in motion. Thanks to PhoXi 3D Instant Meshing software, you can scan an object from multiple perspectives and get its complete 3D model even if the object is moving in front of the camera.

THE POWER OF PARALLEL STRUCTURED LIGHT

The ability to provide high-quality snapshots of 3D data in real time opens new possibilities for industrial automation. The robot does not need to stop to acquire data and can handle objects that move randomly.

PERFECT 3D VISION

With the camera from Photoneo, you get the perfect mix of:

- ✓ High quality 3D data
- ✓ Ability to work also in dynamic environments
- ✓ Color information

Finding products with any of the above features has been possible since before - but finding them within one single unit is a game changer!

Watch it in action here!

COMPUTER VISION

OEM Automatic has many years of experience in products for imaging and vision applications. With us, you will find all components needed for your vision system; factory automation, robotics, medical or individual components to embed into your custom project. Our unique range combined with high-quality support and product knowledge makes us the obvious choice when selecting components for your vision project.

Thanks to our unique product range, we can offer the most suitable and cost-effective solution for each application. On top of that, together with OEM Automatics complete portfolio, we can offer one of the automation markets broadest product range. We operate in Sweden, Norway, Denmark and Iceland and through sister companies in UK and Finland.

LEADING MANUFACTURERS

The broad and unique product range is made possible by our partnering manufacturers that are specialized and market leading in their respective field. By being our partners' local organization with full responsibility for sales, we can ensure that you get the benefits of a local distributer but at the same time get access to world leading technology and products.

TORBJÖRN FJORDE
Business Area Manager

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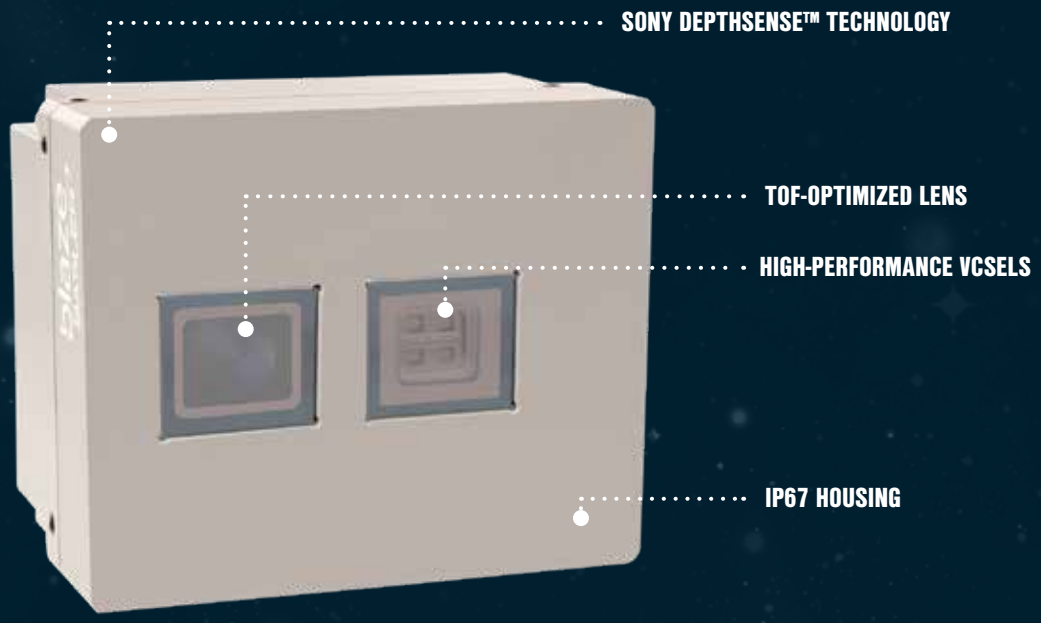


BASLER BLAZE TOF CAMERA – NOW ALSO IN 850NM

Choose the optimal wavelength for your 3D application

The new blaze-102 camera from Basler improves stray light robustness and delivers increasingly precise indoor 3D imaging. With low power consumption, reduced heat generation, and operation in the near-infrared range at 850 nm, the new blaze model is ideally suited for indoor applications in logistics and factory automation.

THE HIGHLIGHTS OF THE BLAZE 3D CAMERA

850 NM AND 940 NM
The right wavelengths
for indoor and outdoor use

IP67 CAMERA
For demanding
industrial applications

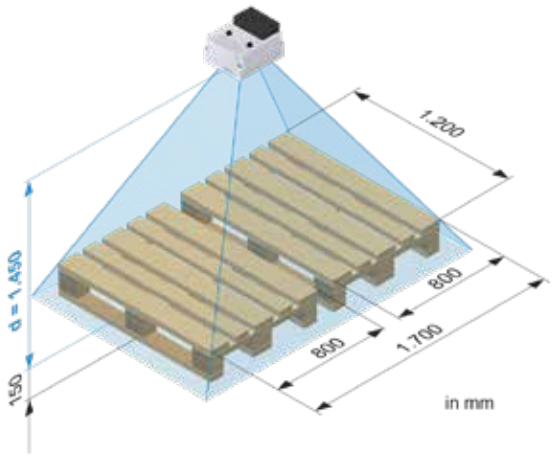
HARDWARE TRIGGER
Precise triggering with low latency
for real-time 3D image acquisition

THAT'S WHAT MAKES THE BLAZE THE IDEAL TOF CAMERA

Its large 67° x 51° field of view and a working distance ranging from 0.3 to 10 meters enables the camera to capture depth data of large objects and entire scenes at once. Sony IMX556-DepthSense™ sensors deliver up to 30 precise 2D and 3D images per second—including distance, intensity, and confidence maps. The light source (VCSEL diodes) and the lens are already integrated, enabling precise 3D measurements based on the time-of-flight technology.

The latest addition to the 3D portfolio combines the best of the familiar blaze features with the advantages of the lower near-infrared waveband to produce a 3D camera model perfect for indoor applications. Increased robustness against stray light in challenging environmental conditions. Improved precision of 3D data due to low depth noise. Optimized power consumption for lower heat generation and operation at higher ambient temperatures.

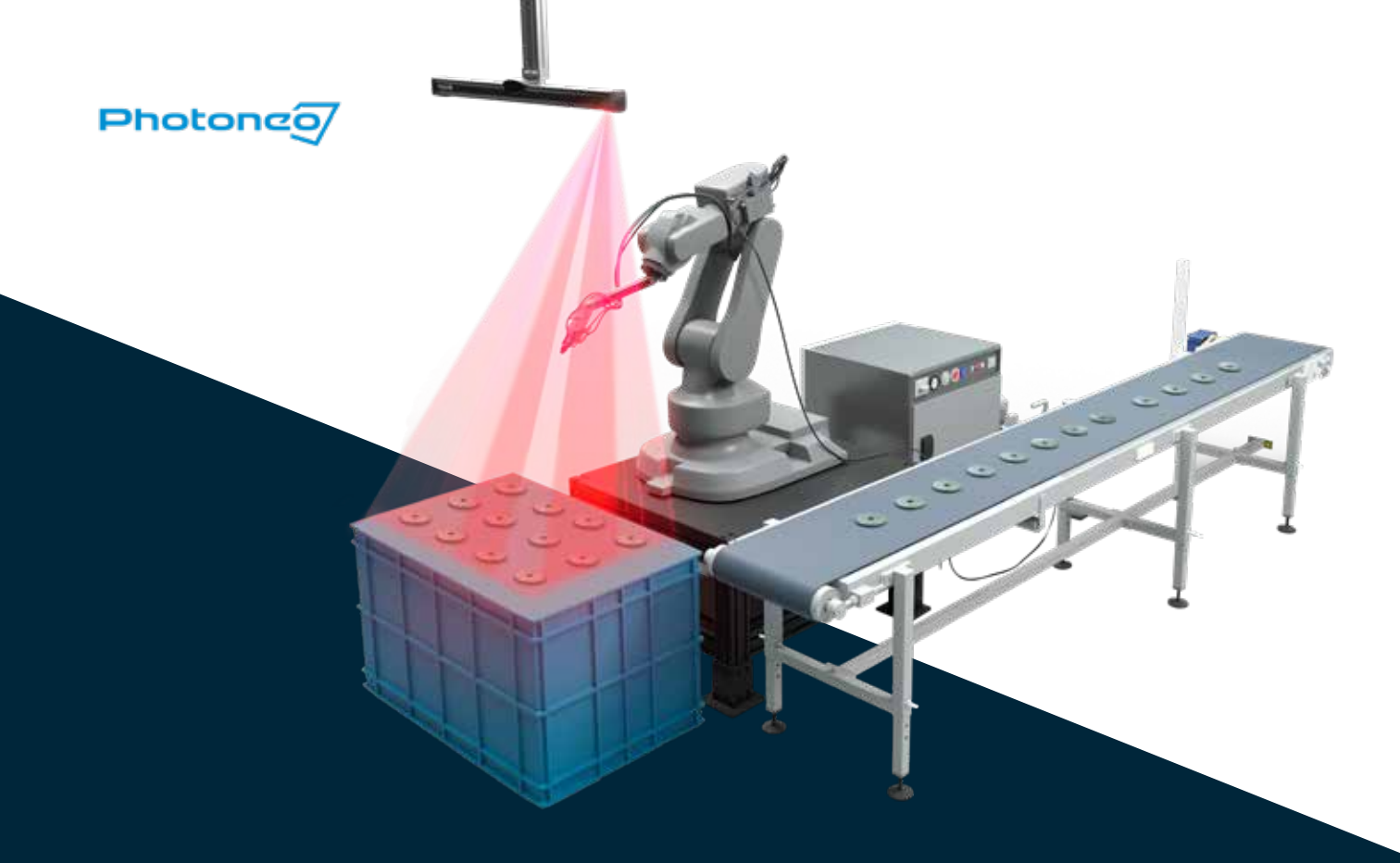
WIDE MEASURING RANGE



BLAZE FEATURES: POWERFUL AND TAILORED TO YOUR 3D REQUIREMENTS

Identical on the outside, with unique strengths on the inside – the difference between the two variants lies only in their operating wavelength. The original Blaze-101 with 940nm especially useful for outdoor use or the new blaze-102 with 850nm for indoor use. Apart from the wavelength, both blaze ToF camera models have the same powerful feature package:

- ✓ 640x480px resolution at 30 fps with Sony DepthSense™ IMX556
- ✓ 0.3 – 10 m working range with accuracy down to 5mm
- ✓ Dual Exposure HDR for scenes with large differences in brightness
- ✓ Hardware triggers for precisely synchronized images
- ✓ New bandwidth control for optimal GigE load management
- ✓ New latency reduction for improved real-time capability and reduced motion blur



Simple way of 3D picking

LOCATOR STUDIO BY PHOTONEO

EASY, FAST & RELIABLE

The Locator Studio by Photoneo is a new robotic intelligence software that offers an intuitive UX/UI design, high compatibility with any model of industrial robot or manipulator and easy plug & play installation. If you are looking for a product that will help you with your de-racking applications or handling of oriented / semi-oriented objects in a non-collision environment -then the Locator studio is a must-use solution.

A TOOL FOR FAST 3D PICKING

Locator Studio can be used for oriented and semi-oriented parts in collision-free environments and has fast scanning speed and superior 3D point cloud quality. Thanks to its simplicity, Locator Studio provides faster picking speed than traditional bin picking and yet easy calibration and configuration.

IN WHICH APPLICATIONS CAN LOCATOR STUDIO BE USED?

The tool can be used in all types of applications that require picking objects from flat surfaces such as trays, conveyors or racks, or to locate parts for precise placement, screwing or assembly.

- ✓ Robot agnostic
- ✓ Quick and easy deployment
- ✓ Reports multiple positions for parts (x, y, z, rx, ry, rz)
- ✓ Resistant to temperature changes
- ✓ Open TCP/IP communication protocol
- ✓ Localization engine proven by hundreds of applications

NEOUSYS TECHNOLOGY

New rugged

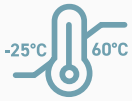
EDGE AI COMPUTER FROM NEOUSYS

Nuvo-9160GC is a rugged edge AI computer that delivers superior CPU and GPU performance by leveraging on Intel's 13th/12th Gen platform and NVIDIA's 130W RTX GPU card. Benefiting from the cutting-edge Intel® 7 photolithography, Intel's 13th/12th Gen processors can offer up to 24 cores/ 32 threads with two times better performance compared to previous Intel 11th/ 10th Gen platforms. The latest NVIDIA® 130W RTX GPU contributes to nearly 9 TFLOPS of FP32 performance to fuel real-time AI inference applications involving multiple cameras such as production line vision inspection, intelligent video analytics for surveillance or ITS, or autonomous mobile robots (AMR).

Nuvo-9160GC has a proven thermal design to guarantee reliable system operation from 25°C to 60°C. It features a passive-cooling design for the motherboard and segregated patented ventilation design for the 130W GPU card within Neousys' patented expansion Cassette. The support of six GigE cameras (or IP cameras) and six USB3 cameras makes Nuvo-9160GC ideal for various vision-based AI application deployments. It also provides flexible data storage options, including one M.2 2280 Gen4x4 NVMe providing up to 7000 MB/s in read/write speed and two 2.5" SATA HDD/SSD to expand storage capacity.

With performance enhancements and comprehensive I/Os, Nuvo-9160GC is the perfect edge AI inference platform for industrial environments from factory automation, smart agriculture, and autonomous machines.

- ✓ Supports Intel® 13th/12th-Gen Core™ up to 16C/ 24T 35W/ 65W CPU
- ✓ Support NVIDIA® RTX series GPU card up to 130W TDP
- ✓ -25°C to 60°C wide temperature rugged operation
- ✓ 5x 2.5GbE and 1xGbE with optional PoE+ (ports 3~6)
- ✓ 1x USB 3.2 Gen2x2 type-C and 6x USB 3.2 type-A ports
- ✓ M.2 2280 M key socket (Gen4x4) supporting NVMe SSD
- ✓ Accommodates two 2.5" SATA HDD/ SSD with RAID 0/ 1 support
- ✓ MezIO™ interface for add-on expansion



TRUE WIDE-TEMP.

NVIDIA RTX™ GPU FOR AI INFERENCE

POE CAMERA CONNECTIVITY

USB3.2 CAMERA CONNECTIVITY

FLEXIBLE STORAGE

Torbjörn Fjorde,
Business Area Manager at Computer Vision

IMAGING & VISION CHANGES NAME TO COMPUTER VISION

New technology requires new names. After many years of development and innovation, it is time for us to rename our product area. What was previously known as 'Imaging & Vision' will now be renamed to 'Computer Vision' to reflect today's needs and our focus on innovation and progress. With the latest technology and our commitment to development, we will continue to offer our customers the most innovative solutions in Computer Vision. We look forward to being part of this development and helping you take your business to the next level.

Computer Vision is one of the latest technologies that is changing the playing field for companies in a variety of industries. We have interviewed Torbjörn Fjorde, Business Area Manager at Computer Vision, to find out why this product area is undergoing a name change, and how the technology has developed in recent years.

WHY ARE YOU CHANGING IMAGING & VISION TO COMPUTER VISION?
We are changing our name because technology has evolved a lot since we started the product area many years ago. At that time, cameras were larger, more expensive and analogue. Although there was automatic quality control, also called Machine Vision, the cameras were mainly used to display an image on a screen that was more or less manually analyzed. The name 'Imaging & Vision' was suitable at that time, but today it is more about giving a computer "sight" to make decisions. Therefore, renaming the product area to Computer Vision is relevant and timely. We are happy to be a part of this development and continue to offer our customers the latest technical solutions in Computer Vision!

WHAT FUTURE APPLICATIONS CAN WE EXPECT TO SEE IN THIS FIELD?
By offering "sight" to computers and machines, companies can now automate and streamline processes in a way that was not possible before. We see, for example, an increasing demand in applications like self-driving cars, buses and boats. Here, AI (Artificial Intelligence) also comes into play as the vehicles must be able to "make their own decisions" depending on what happens during the journey.

WHAT RANGE OF PRODUCTS DO YOU OFFER IN COMPUTER VISION TODAY?
We have a complete range of products for most applications within Computer Vision. This includes everything from cameras with accessories to customized computers and software. In recent years, we have worked to expand the range in 3D, where we now cover all common techniques from simpler solutions with an accuracy of around a centimeter, to products with micrometer precision.

Image processing simplified

PYLON VTOOLS FROM BASLER

The pylon vTools enable you to design, test and flexibly integrate intelligent structure recognition, precise object positioning or robust code recognition in one go with camera control and image acquisition - always perfectly matched to Basler's camera portfolio.

Many companies using computer vision are confronted with a number of challenges. There is often a lack of image processing experts in the development team, and building up image processing know-how turns out to be very time-consuming. In addition, the integration of simple visual tools into in-house architecture is very complex, and in the case of image processing software, large comprehensive modules must be purchased, even when only a few functionalities are really needed. The pylon vTools address these challenges and offer you seamlessly integrated image processing with the proven pylon software, so you get image acquisition and image processing from a single source. The vTools are easy and quick to create visually, and easy to integrate into existing architectures. The functions are offered in small, cost-effective modules - you only buy the ones you really need.

EASY CREATION IN PYLON VIEWER

Create image processing functions quickly and easily in the pylon Viewer's Workbench. Here you can select, insert, and configure individual processing steps as vTools. By connecting single vTools together, you can create and test complete image processing workflows. Save image processing workflows created in the Workbench as recipe files, to use them in your own applications.

PRECISE ADJUSTMENT WITH LIVE IMAGE

Individual processing steps of pylon vTools as well as the entire image processing workflow of a recipe file can be tested and precisely adjusted within the Workbench on the live image. This allows you to quickly and easily achieve optimal performance and accuracy for real-world situations.

FLEXIBLE INTEGRATION WITH PYLON APIS

To integrate image processing functions into your own applications, the popular pylon APIs offer a variety of simple functions for loading and executing recipe files, and for evaluating the results in your program code. Adjust the settings of your application via recipe file using the pylon Viewer - without having to change or recompile the application code.

ADVANTAGES OF BASLER PYLON VTOOLS

- ✓ Quickly and easily design complex, high-performance image processing functions for your applications
- ✓ Use intelligent structure recognition, micrometer-precise object positioning, or robust code recognition and design
- ✓ Test and flexibly integrate these tools into your own application alongside camera control and image acquisition
- ✓ Tailored to optimize performance of Basler's camera portfolio

OUR RANGE

Product area Computer Vision has many years of experience in products for image and vision applications. With us, you will find all the components needed for your vision system - from optics and cameras for both 2D and 3D to industrial computers and software and everything in between.

CAMERAS

3D PRODUCTS

INDUSTRIAL COMPUTERS

INTERFACE SOLUTIONS

SOFTWARE

ACCESSORIES
Lenses, LED Lighting, Filter, Enclosures

iNSPO

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BASLER
the power of sight

SEE BEYOND THE VISIBLE WITH BASLER SWIR CAMERAS

ADVANCED TECHNOLOGY AND IMPROVED SENSOR PERFORMANCE: TAKE A DEEPER LOOK AT WHAT'S INSIDE

A peek behind the curtain: Short-wave infrared (SWIR) cameras allow a look beneath the surface. Whether it's checking security features, detecting fill levels, shining a light through complex structures, or detecting hidden objects - Basler ace 2 X visSWIR cameras allow a close look at what remains hidden from our human eye. A wide range of applications can benefit from this advanced technology featuring high analysis flexibility and accurate detail recognition.

OTHER BENEFITS INCLUDE:

- ✓ Small housing with proven 29 mm x 29 mm footprint – suitable for a wide range of industrial applications
- ✓ Equipped with the highly sensitive Sony IMX990/991 SenSWIR sensors
- ✓ Capable of capturing images in both the visible and invisible light spectrum with wavelengths from 0.4 µm to 1.7 µm
- ✓ Available with USB 3.0 and GigE interfaces
- ✓ Easy integration thanks to Basler's pylon Software
- ✓ A wide range of matching visSWIR vision components – all extensively tested and fully compatible
- ✓ visWIR Lenses with high transmittance at whole wavelength of 0.4 µm -1.7 µm
- ✓ Short-Wave Infrared Bandpass Filter, SWIR selection of Basler Lights, Interface Cards and IP67 Housing
- ✓ Top price-performance ratio for a complete visSWIR Vision System
- ✓ Known reliability and longevity of Basler products with 3-year warranty

SEE WHAT IS HIDDEN BENEATH THE SURFACE: APPLICATIONS FOR THE ACE 2 X VISSWIR

Integrated into the proven Basler ace 2 camera series and equipped with Sony's innovative SenSWIR sensors, visSWIR cameras allow wavelengths from 0.4 µm to 1.7 µm to be detected. It is now possible to capture both visible and non-visible light with one camera. Basler ace 2 X visSWIR cameras guarantee extraordinarily high quality at an impressive price/performance ratio for diverse applications.

SMARTRAY ECCO X

New Generation 3D laser triangulation

HIGH RESOLUTION AND SPEED WITH MOUNTING FLEXIBILITY TO MEET THE HIGHEST INSPECTION DEMANDS

Offering 4,096 points of resolution and a scan rate of up to 40 kHz, the ECCO X targets the challenges of automated optical inspection in electronics and other challenging industries. Available with either a class 3R or class 2 laser, the sensor is available with four different cable mountings. Like the existing ECCO 3D sensors, the unit integrates with the current range of SmartRay and industry-standard vision software.

MORE ACCURACY AND SPEED FOR MANUFACTURERS OF ADVANCED, PRECISION EQUIPMENT

With a measurement range of 20 mm and a stand-off distance of 65 mm, the ECCO X 25 delivers a typical vertical resolution of 0.9 – 1.4 µm and a typical lateral resolution of 5.0-7.0 µm. The Z-linearity is 0.005 %, and Z-repeatability is 0.2 µm, targeting manufacturers demand on miniaturized electronics and precision-machined or 3D-printed mechanical parts to meet the innovation demands of their customers. The typical scan (full FOV) rate of up to 40kHz delivers up to 163 million points/s.

The sensor provides a gigabit Ethernet (1 Gbit/s) interface, a quadrature encoder interface (AB-Channel, RS-422), and two inputs and outputs to support a range of start, data triggering, and output options. Its enclosure is rated to IP67, and its operating temperature ranges from 0 – 40 °C.

SIMPLE TO INSTALL FOR COMPLEX AUTOMATED VISUAL INSPECTION

Measuring only 48×84×125.3 mm, and weighing under 750 g, installation is simplified thanks to four different cable attachment options, enabling easy mounting onto existing inspection systems.

- ✓ 40 kHz typical scan rate
- ✓ Exceptional 4,096 3D points of resolution
- ✓ Four connector options for maximum flexibility
- ✓ Gigabit Ethernet and quadrature encoder connectivity
- ✓ Input voltage of 24 VDC at 10 W
- ✓ Rated to IP67 and operational from 0 – 40 °C

CONTACT US

Do not hesitate to contact us if you have any questions.

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PORTO BETALT

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OEM AUTOMATIC

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