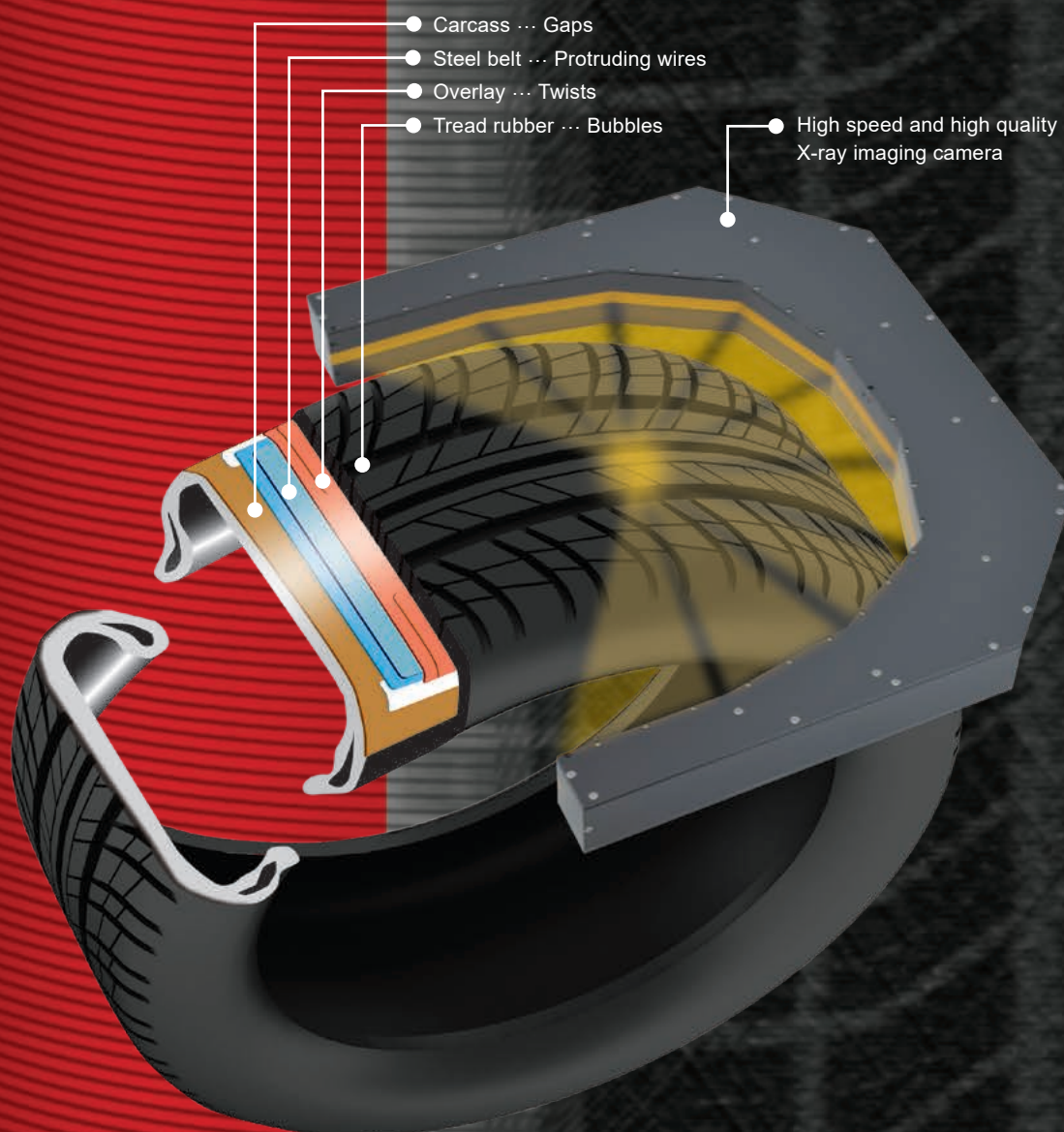


X-ray line scan camera

C12450-27FGC series

Accurate defect detection
for tire inspection

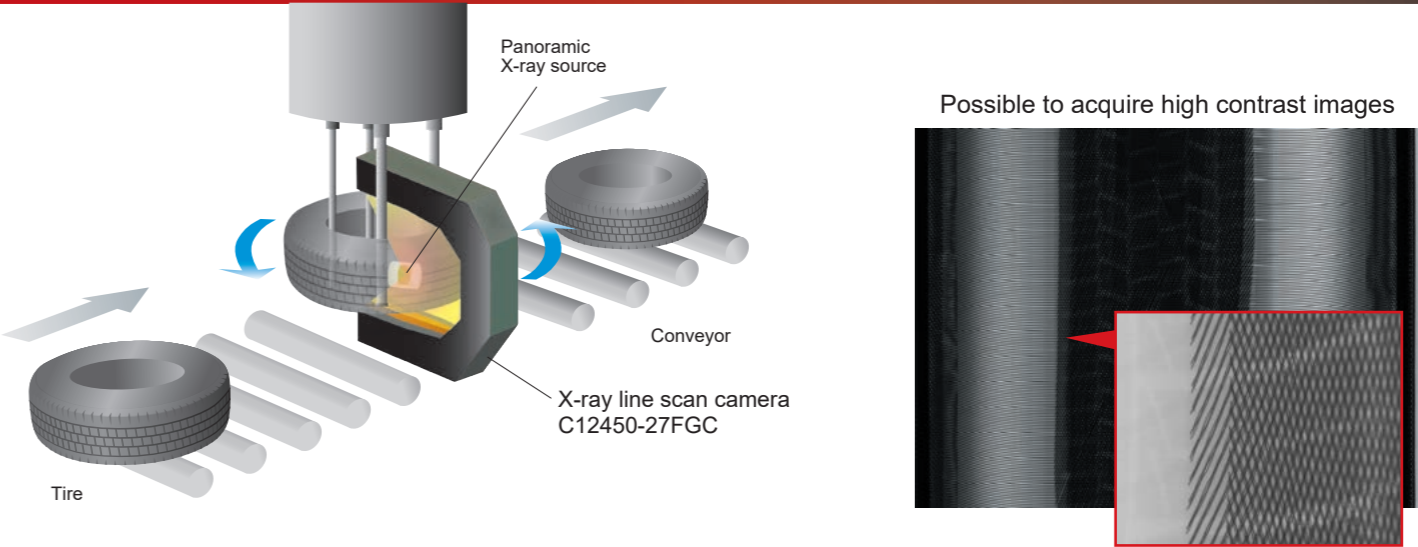


Features

- Sensitivity range: 25 kV to 160 kV
- Sensor element pitch: 0.4 mm
- Line speed: 4 m/min to 120 m/min
- Digital output: 16 bit
- Digital interface: Camera Link (C12450-27FGC-C)
Gigabit ethernet (C12450-27FGC-G)

No dead areas between sensors realize accurate inspection of disconnection defects inside a tire.

The X-ray line scan camera C12450-27FGC series is to meet the demands in the tire inspection. It offers an image of 0.4 mm pixel size × 3456 pixels resolution horizontally with no gap (<1 pixel) for whole effective area while the tire rotate one revolution. The high sensitivity and wide intensity dynamic range provide fast and excellent detectability for reliable inspection.

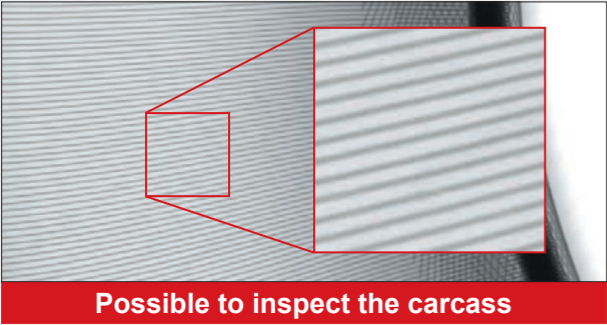


APPLICATION EXAMPLES

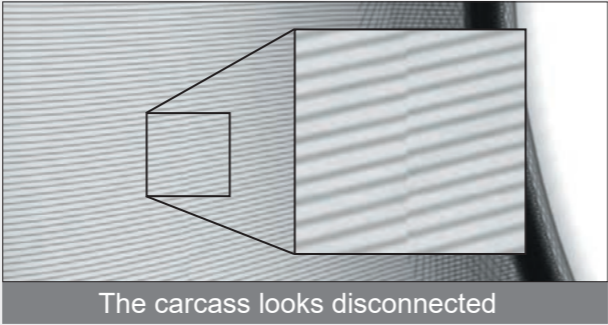
Other cameras can make inspection difficult.

If the camera has dead areas between sensors, the carcass looks disconnected. It is difficult to identify carcass disconnection when the image is shifted due the dead areas.

C12450-27FGC has no dead areas between sensors.



The other manufacturer's camera has dead areas between sensors.



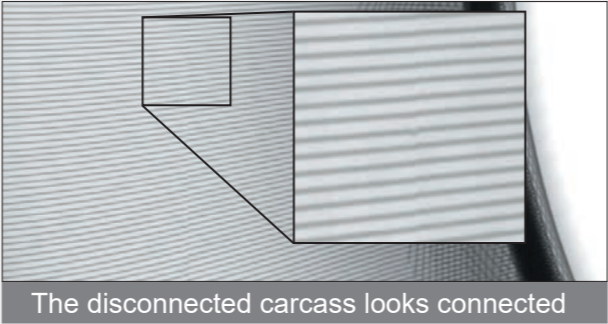
Other cameras can miss potential failures.

If the camera has dead areas between sensors, the disconnected carcass looks connected. The carcass disconnections can be overlooked and the defective tires can pass the inspections.

C12450-27FGC has no dead areas between sensors.



The other manufacturer's camera has dead areas between sensors.



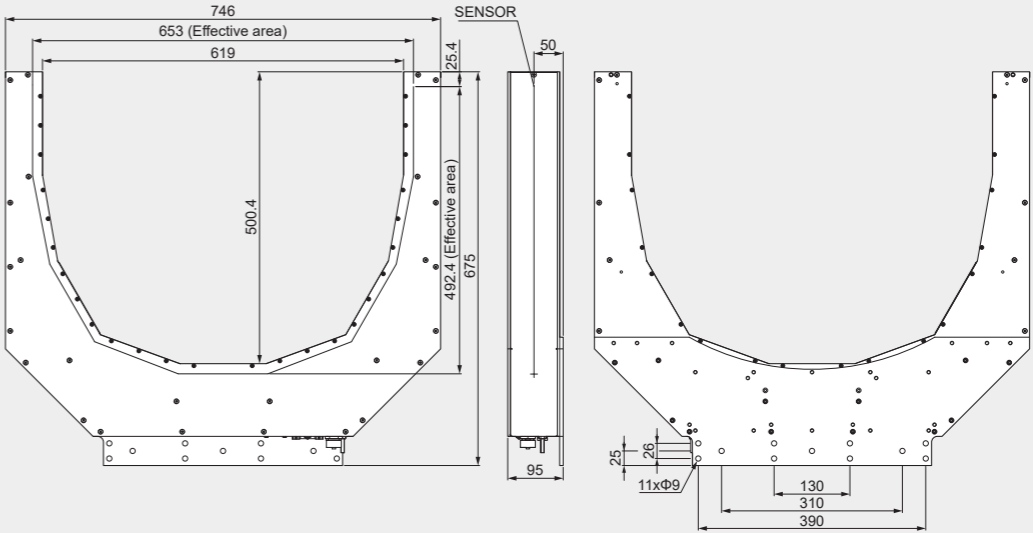
SPECIFICATIONS

Type number	C12450-27FGC-C	C12450-27FGC-G
Scintillator	Gd-Scintillator	
Effective X-ray tube voltage range	Approx. 25 kV to 160 kV	
Sensor element pitch	0.4 mm	
Number of pixels	3456 (H) × 1 (V)	
Line speed	4 m/min to 120 m/min	
Digital interface *1	Camera Link	Gigabit ethernet
Digital output	16 bit	
Power supply	DC+15 V	
Power consumption	Approx. 23 VA	
Ambient operating temperature	0 °C to +45 °C	
Ambient operating humidity	30 % to 80 % (With no condensation)	
Ambient storage temperature	-10 °C to +55 °C	
Ambient storage humidity	30 % to 90 % (with no condensation)	

*1 For digital interface other than the above specifications, please contact our sales.

DIMENSIONAL OUTLINES (Unit: mm)

- C12450-27FGC-C, -G (Approx. 25 kg)

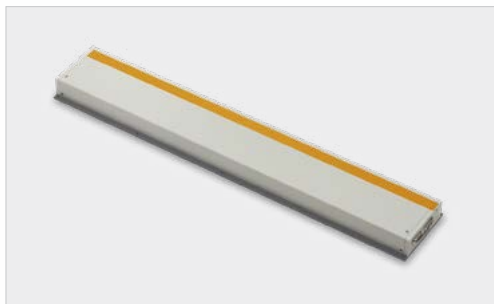


RELATED PRODUCTS

Hamamatsu supports various tire inspections with our broad product lineup and advanced technologies.

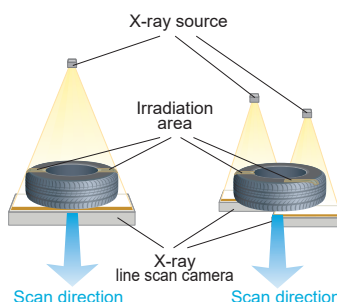
● X-ray line scan camera C14300 / C14960 series

Straight / High resolution type

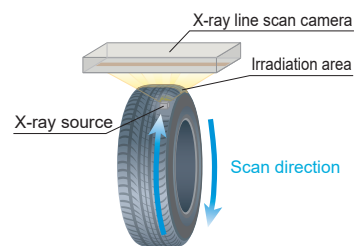


* Please contact our sales for the detection width and the shape of the camera.

● Protruding wire inspection



● Tread inspection



● Internal structure inspection (long format)

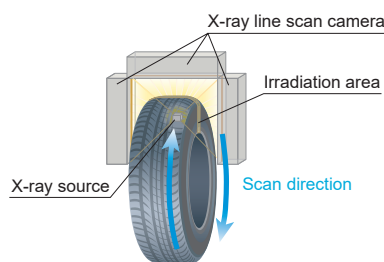


V-shaped type (customized product)



* Please contact our sales for the detection width and the shape of the camera.

● High quality inspection



- Product and software package names noted in this documentation are trademarks or registered trademarks of their respective manufacturers.
 - Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult your local sales representative.
 - Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions.
- Specifications and external appearance are subject to change without notice.
- Please note the X-ray images on this brochure are taken for test purpose, the images do not reflect actual qualities of the products on the market.

© 2021 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

Systems Division

812 Joko-cho, Higashi-ku, Hamamatsu City, 431-3196, Japan, Telephone: (81)53-431-0124, Fax: (81)53-433-8031, E-mail: export@sys.hpk.co.jp

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, Bridgewater, NJ 08807, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: usa@hamamatsu.com

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-265-8 E-mail: info@hamamatsu.de

France: Hamamatsu Photonics France S.A.R.L.: 19, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10 E-mail: infos@hamamatsu.fr

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, UK, Telephone: (44)1707-294888, Fax: (44)1707-325777 E-mail: info@hamamatsu.co.uk

North Europe: Hamamatsu Photonics Norden AB: Torshamnsgatan 35 16440 Kista, Sweden, Telephone: (46)8-509 031 00, Fax: (46)8-509 031 01 E-mail: info@hamamatsu.se

Italy: Hamamatsu Photonics Italia S.r.l.: Strada della Moia, 1 int. 6, 20044 Arese (Milano), Italy, Telephone: (39)02-93 58 17 33, Fax: (39)02-93 58 17 41 E-mail: info@hamamatsu.it

China: Hamamatsu Photonics (China) Co., Ltd.: 1201 Tower B, Jiaming Center, 27 Dongsanhuan Beilu, Chaoyang District, 100020 Beijing, P.R. China, Telephone: (86)10-6586-6006, Fax: (86)10-6586-2866 E-mail: hpc@hamamatsu.com.cn

Taiwan: Hamamatsu Photonics Taiwan Co., Ltd.: 8F-3, No.158, Section 2, Gongdao 5th Road, East District, Hsinchu, 300, Taiwan R.O.C. Telephone: (886)3-659-0080, Fax: (886)3-659-0081 E-mail: info@hamamatsu.com.tw

Cat. No. SFAS0030E03
AUG/2021 HPK
Created in Japan