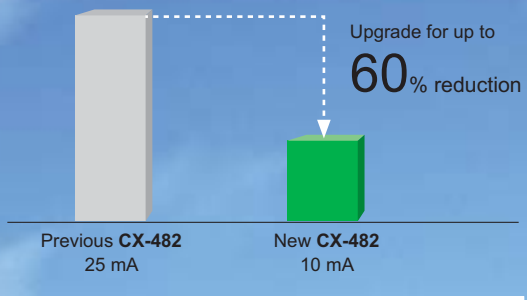
Upgrade 1

Reducing environmental burdens further

Up to 60% less power consumption

The **CX-400** series achieves reductions in power consumption of up to 60%, averaging 44% reduction when upgrading due to its unique design. These sensors reduce carbon emissions and contribute to environmental friendliness.



Contributing to reduced carbon dioxide emissions

Electricity consumed by the **CX-400** series has been reduced on average 10.5 mA. Calculating 8 hours/day, 260 days (operating 5 days/week) for a total of 2,080 hours/year leads to:

▶ The **CX-400** contributes **Approx. 84.6 t** annually in carbon dioxide reductions to the world

Upgrade 2

Stronger noise resistance

Stronger inverter countermeasures

The **CX-400** has a high noise resistance then its previons model. By incorporating an inverter countermeasure circuit that appropriately shifts with peak wavelength, the sensor now resists high-frequency noise from high-voltage inverter motors and inverter lights more effectively.

Upgrade 3

Stronger output short-circuit resistance

Stronger inverse wiring connection protection

Strengthening the output circuit inverse polarity protection prevents sensor damage caused by mistaken output or power supply wiring.

High Performance

High performance
For many applications

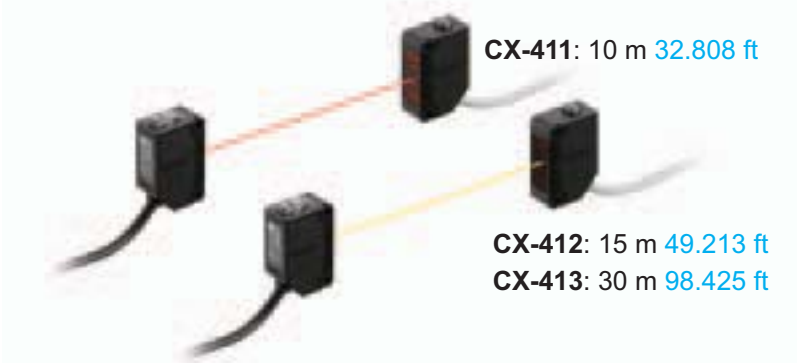
Thanks to its unique optics and specialized design, the **CX-400**'s electronic circuits allows for consistent sensing of minute 0.4 mm 0.016 in (the thickness of a business card) differences or 10 µm 0.394 mil ultra-thin film.

Save

Thoroughly eliminating unnecessary waste,
Reducing many environmental burdens

The **CX-400** series have three different cable length types and uses very simple packaging to reduce waste. The bag is made of polyethylene and does not emit toxic gasses.

Thru-beam type

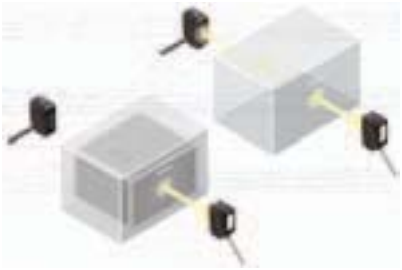


CX-411: 10 m 32.808 ft

CX-412: 15 m 49.213 ft
CX-413: 30 m 98.425 ft

Strong infrared beam
CX-412/413

Remarkable penetrating ability enables applications such as package content detection come into practice. (Note)



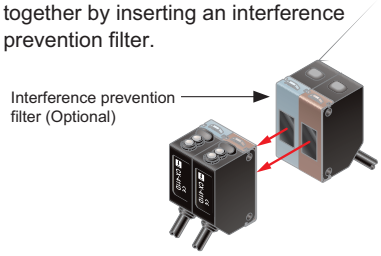
Note: When sensing utilizing penetrating power, make sure to verify using the actual sensor.

Strong in dust and dirt
CX-412/413

The infrared light source is strong in dust and dirt compared to the red beam type.

Even the thru-beam type is strong at mutual interference
CX-411

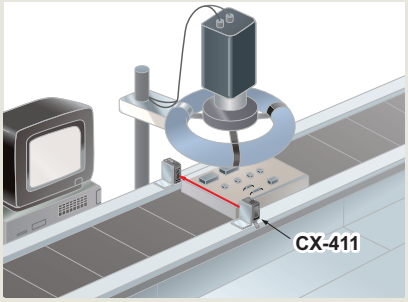
Two **CX-411** sensors, with their red beam light source, can be installed close together by inserting an interference prevention filter.



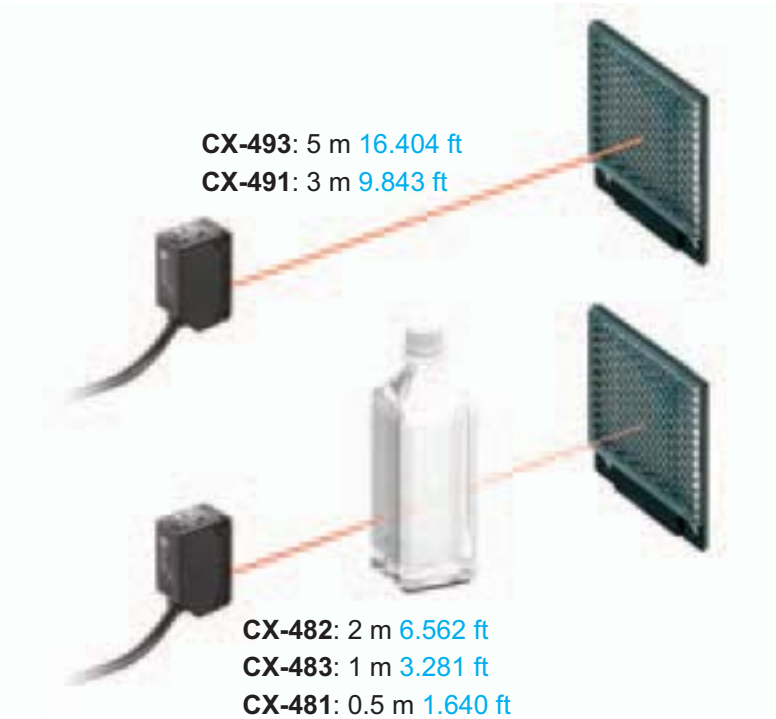
Applications

■ Detecting box collapsing within the rail of stacker crane

■ Synchronizing sensor for image processing systems



Retroreflective type



CX-493: 5 m 16.404 ft
CX-491: 3 m 9.843 ft

CX-482: 2 m 6.562 ft
CX-483: 1 m 3.281 ft
CX-481: 0.5 m 1.640 ft

For transparent object sensing

Long sensing range of 5 m 16.404 ft
CX-493

A long 5 m 16.404 ft sensing range is possible with the red LED type that is easy to align with the beam axis. The sensors can be used for wide automatic door shutters.

Retroreflective type with polarizing filters
CX-491

Built-in polarizing filters ensure stable sensing even on a mirror surface object.

Strong against extraneous light and noise
CX-491

Hardly affected by extraneous lights or noises, these sensors provide stable sensing.

Two sensors can be mounted close together
All models

The interference prevention function lets two sensors of any type to be mounted close together precisely.