

# Dental Scintillators

## CsI coated fibre optic plates optimised for dental applications

Our high performance CsI imaging devices are designed individually for all sizes of dental sensor within a customer's product range, providing a class leading edge-to-edge image area.



## product range

#### Csl Intra-Oral

Excellent uniformity and ultra-high resolution imaging for intra-oral dental X-ray applications.

### **Csl Panoramic**

Fast response, high resolution, dynamic image capture for dental X-ray of the upper and lower jaw.

## CsI Cephalometric

Fast response, high resolution, dynamic image capture for dental X-ray of the cranio-maxillofacial regions.

## Csl Cone Beam CT

High resolution, real time 3D imaging of the teeth and head for orthodontic and surgical procedures.

#### customised solutions

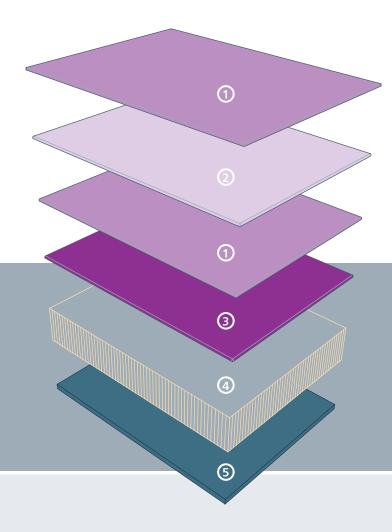
Resolution, sensitivity, size and shape are a few of the parameters that can be influenced in the production of a customised CsI product.

Talk to our expert team to see how together we can deliver clever and custom scintillation components to meet our customer's needs.

## features

- Ultra-high resolution
- Fast response for sharper imaging
- Customisable size and shape profile
- Class leading edge-to-edge image area
- Range of coating thicknesses
- Optional absorber / reflector layers
- Suitable for CCD and CMOS devices
- Low patient X-ray dose





- **1.** Protective parylene layer(s) maintain the quality of the scintillator performance.
- 2. Optional absorber / reflector layer in conjunction with FOP choice, is used to fine tune performance to customers needs.
- **3.** Caesium iodide coating provides state-of-the-art thallium doped scintillator with columnar structure.
- **4. Fibre optic plate** X-ray blocking and image transmitting properties are key features of this multi-functional component.
- **5.** CMOS / CCD image capture device and electronics.

## flexibility

#### Size and Shape

Customised to your package design

#### **Coating Thickness**

Tailored performance to meet your application needs

#### **Quality Area**

Up to 98% of the active area.

#### Absorber / reflector layers

Range of optional layers for customised imaging results

## class leading image area

The fibre optic plate (FOP) consists of X-ray absorbing glass fibres fused to form a continuous structure. It is coated with columnar CsI, a material that converts X-rays into visible light.

Our edge-to-edge CsI deposition maximises the image sensor active area. Proprietary production methods provide a superior and robust finish, eliminating damage from transit and handling, maintaining image quality right to the edge of the sensor.

The resulting fibre optic scintillators (FOS) efficiently transmit the converted X-ray light, with virtually no loss of light intensity or resolution for clear dental imaging.

## specification

Scintillator Type	Csl:Tl
FOP Thickness	from 0.6 mm
Scintillator Thickness	up to 600 um
Active Area	up to 100% of the FOP area
Relative Light Output	up to 90% lanex regular
Resolution (% Typ.)	40% at 10 lp/mm
Device Dimensions	fully customisable range of application specific device dimensions

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