PRELIMINARY DATASHEET

Rad-icon 2329



Key Features

- Active area 228 x 292 mm
- 10 lp/mm resolution
- 2 fps max. frame rate
- Gigabit Ethernet interface
- 14-bit digital video output
- Energy range from 10 to 225 kV
- Ready-to-run software and drivers

Overview

Teledyne DALSA's *Rad-icon* product family of largearea digital x-ray cameras offers users a highspeed, high-performance x-ray imaging detector with a fast, reliable PC interface (either GigE or CameraLink) for easy integration. The Rad-icon product line leverages Teledyne DALSA's advanced CMOS image sensing technology, which enables the delivery of low-dose x-ray images and yields higher image quality than a-Si flat panels and image intensifier devices. The cameras in this product line are capable of frame rates up to 30 fps, and communicate via a standard Cat6e or CameraLink data cable over lengths up to 100m.⁽¹⁾

The Rad-icon 2329 camera features includes: (1) very large active area of 228 x 292 mm; (2) 5888 x 4608 pixel resolution (49.5 µm pixel size); (3) fast, real-time image transfer via Gigabit Ethernet interface; (4) 14-bit digitization of images; and (5) SDK's, drivers and programming support. The camera interface allows easy access to features such as adjusting the frame rate, single and multiple frame acquisitions, and control of advanced timing modes. Each camera ships with our ShadoCam Imaging application and Teledyne DALSA's CamExpert software, which provide simple, user-friendly tools for communicating with the camera and acquiring images.



Preliminary Specifications

Detector Specifications		Units
Typ. dark current (23°C) $^{(1)}$	12	ADU/s ⁽²⁾
Read noise (rms)	4-8	ADU
Typ. dynamic range	3000:1	
Digitization	14	bits
Image lag	<0.1	%
Non-linearity (1090% FS)	<1.5	%
Max. frame rate (full res.)	2	fps

⁽¹⁾ dark current doubles approx. every 8°C

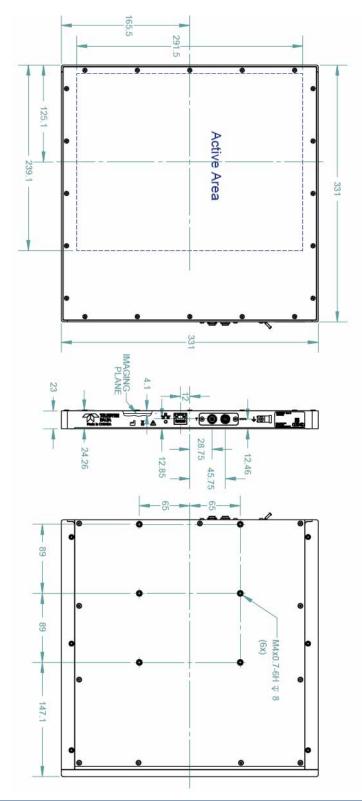
⁽²⁾ ADU = Analog-Digital Unit = 1 LSB (Least Significant Bit)

Camera Specifications		Units
Typical supply voltage	12.0	Volts
Supply voltage range	11 to 13	Volts
Maximum supply current	3.0	Amps
Typical power dissipation	< 20	Watts
Camera interface	Gigabit Ethernet	

General Specifications		Units
Operating temperature	10 to 40	°C
Storage temperature	-10 to +55	°C
Humidity (non-condensing)	10 to 80	% R.H.
Dimensions	322 x 315 x 23	mm
Weight	3.4	kg



Mechanical Drawing





Contact

Teledyne DALSA, a Teledyne Technologies company, is an international leader in high performance digital imaging and semiconductor technology. For more information on our products and market applications please visit our website at http://www.teledynedalsa.com/ndt.