TELEDYNE e2v
Everywhereyoulook™

UNiiQA+ 2k
Monochrome and colour
Line scan camera

Unleash the potential of your inspection system

Key benefits

- 2,048 pixels, 10µm x 10µm pixel size
- Available in monochrome or colour
- Maximised throughput with high-speed models
- Equipment is cost effective, even in colour
- Flexible optics choices and costs: C-mount, F-mount, M42 mount compatible
- The smallest form factor to fit into any mechanical set-up
- CameraLink and NBASE-T interface

Applications

- Online quality control and inspection:
  - o Plastics
  - o Films
  - o Glass
  - o Paper
  - o Non-woven
  - o Wood
- Barcode reading
- Microscopy
- Industrial inspection

MEMBER NBASE-T ALLIANCE℠

Vision Systems DESIGN 2017 Innovators Awards GOLD

STEMMER® IMAGING

TELEDYNE e2v
Everywhereyoulook™

UNiiQA+ 2k
Monochrome and colour Line scan camera

Teledyne e2v's new UNiiQA+ family of line scan cameras has been specifically designed to bring affordable, flexible and simple high speed solutions to your current raw material inspection system. There are three UNiiQA+ product ranges:

- Essential models, designed for cost effective applications
- High speed models, for high performance applications
- High resolution models, for tiny detail detection or for covering large areas

High speed and essential level models are available in any resolution from 0.5K to 4k, in both colour and monochrome. The high resolution model is available in monochrome with a 16k resolution.

Sensor characteristics

	Mono	Colour
Resolution – pixels	2,048	
Pixel size – square µm	10	
Maximum line rate – kHz	140	100
Number of active lines	1	1
Camera interface	CameraLink/NBASE-T	

Functionalities

Maximum analogue gain – dB	12	
Offset correction – LSB8bit	-4,096 to +4,095	
Trigger mode	Timed (Free run) and triggered (Ext Trig, Ext ITC)	
White balance	-	yes
Flat field correction	yes	
Scan direction	yes	

Typical performances

Bit depth – bits	8/10/12	24
Spectral range – nm	300 – 1,100	
Dynamic range – dB	73 (CameraLink)	56 (CameraLink) and 65 (NBASE-T)
PRNU – %	<3	
Non linearity – %	<1	

Mechanical and electrical interface

	Mono	Colour
Size – W x H x L mm	6 x 60 x 34 (CameraLink) and 60 x 60 x 55 (NBASE-T)	
Lens mount	C, F, T2, M42 x 1	
Sensor alignment – µm	± 100	
Sensor flatness – µm	± 50	
Power supply – V	12-24 (CameraLink) and Single 10 DC to 15 DC (NBASE-T)	
Power consumption – W	<4 (CameraLink) and <11 (NBASE-T)	

Connectors

Control and data	2 x SDR (CameraLink) and GPIO 12 (NBASE-T)
Power	Hirose 6 pins

General features

Operating temperature – °C	0 to 60
Storage temperature – °C	-40 to 70
Regulatory	CE, FCC and RoHs compliant

Part number	No. of lines	Pixel size (µm x µm)	Mono/ Colour	Interface	Max line rate
EV71YC1MCL2010-BA0	1	10 x 10	Mono	CameraLink	40
EV71YC1MCL2010-BA1	1	10 x 10	Mono	CameraLink	100
EV71YC1MNT4005-BA0	1	10 x 10	Mono	NBASE-T	140
EV71YC1CCL2010-BA0	1	10 x 10	Colour	CameraLink	40
EV71YC1CCL2010-BA1	1	10 x 10	Colour	CameraLink	80
EV71YC1CNT4005-BA0	1	10 x 10	Colour	NBASE-T	100