

SIM



OPTICAL

Number of Channels	4 to 16
Optical Input	Single input beam splitting optics Channel can be fitted with individual filters
Lenses	Nikon F-mount
System Aperture	f2.8
Shutter	Electro-mechanical
Distortion	Nominally zero
Channel registration	Within one pixel after software correction
Intensity variation	Better than 5% across the image
Auxillary Optical Channel Interface	Nikon F-mount bayonet

INTENSIFIER/CCD

Image Sensor	ICX285AL
Active CCD Pixels	1360 (H) x 1024 (V)
Pixel Size	6.45µm (H) x 6.45µm (V)
Dynamic Range	12 bits
Intensifier	18mm High-Resolution MCP Output window Fiber Optic Photocathode S25, others on request Phosphor Screen P43.
Gain	Variable up to 10,000
Dynamic resolution	>50 lp/mm

TIMING PARAMETERS

System Clock	200MHz quartz crystal controlled
Inherent Delay	<65ns
Exposure Modes (each image)	Single exposure or multiple exposures (Max. 8) per channel
Exposure Times	5ns – 10ms in 5ns steps independently variable
Interframe Times	0ns – 20ms in 5ns steps independently variable
Delay to 1st exposure	50ns – 10ms in 5ns steps independently variable
Flash output	5ns – 1ms in 5ns steps independently variable
Framing rates	100 – 200,000,000
Separation Times (Multiple exposures on same channel)	30ns to 20ms in 5ns steps independently variable

INPUT/OUTPUT SIGNALS

Trigger 1	Electrical signal (BNC connector) Threshold variable from ± 25V Positive or Negative polarity, Make/Break 50Ω or 1KΩ termination
Trigger 2	Electrical signal (BNC connector) Threshold variable from ± 25V Positive or Negative polarity, Make/Break 50Ω or 1KΩ termination
Timing Monitor Pulses	Pulse width (min. 5ns) and position user programmable TTL into 50Ω
Flash Trigger Outputs	Pulse width (min. 5ns) and position user programmable TTL into 50Ω
Focus Monitor Camera Interface	Integral 8.4" TFT display monitor with keypad control Data and command transfer via 100 Mbps ethernet Cable length 10m (standard), other lengths available 100F X fibre optic ethernet link (upto 2Km) - optional
Software	Custom software compatible with Microsoft Windows Operating Systems for camera control, image data archiving in various file formats.

ENVIRONMENTAL

Storage temperature	-10°C to +50°C
Operating temperature	-5° to +40°C
Humidity	10 – 90% RH non condensing
Vibration shock	10 – 40Hz Max. 10g in any direction
EMC	Meets all EC harmonized standards



BS EN ISO9001:2000 FM 87429