

CORDIN

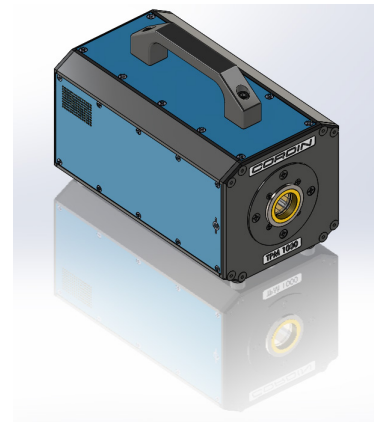
SCIENTIFIC IMAGING

| TEMPORAL PIXEL MULTIPLEXED (TPM) FRAMING CAMERA

Model TPM-1000



- **High resolution:** up to 1K x 1K
- **Solid-state design:** no moving parts
- **Very high framing rate:** up to 10 million fps
- **Software control:** easy control of exposure and timing parameters through user-friendly software
- **Laser and pulsed flash illumination synchronization**
- **Available 2021**



The **Cordin Model TPM-1000** high-speed CMOS camera offers a ground-breaking combination of 5-10 Mfps high-speed framing camera performance at a dramatic new pricepoint. The Cordin TPM-1000 captures images at frame rates of up to 10 million frames per second and up to 1 mega-pixel resolution. The system uses a new TPM architecture jointly developed by Cordin and Oxford University with a unique CMOS sensor chip capable of capturing sub-array images in a burst mode.

With its flexible TPM architecture, the TPM-1000 allows the user to trade off the number of frames in a burst versus resolution, given the available on-chip pixel memory.

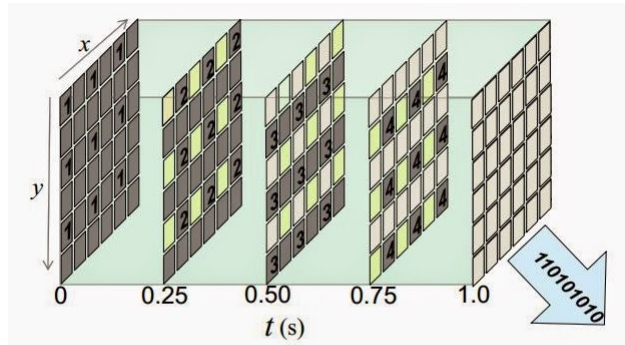
The Model TPM-1000 camera can be triggered by the event being photographed, and can accept triggers in advance or for some time after the event of interest. It can also provide the trigger to initiate the event.

The system comes complete with Cordin's control software application, and is controlled via Ethernet interface by the customer's choice of standard Windows-based PC or laptop. Data may be saved in a wide variety of 8 bit file formats. Full 10 bit images are saved in 16 bit TIFF file format.

OPTIONS

Illumination Sources (Models 605, 606, 607)

Microscope Objective Lenses



Temporal Pixel Multiplexing (TPM)

TPM operation at 512x512 resolution

SPECIFICATIONS

Number of Frames	Configurable	Sensor Size	14 mm x 14 mm (approx)
Maximum Framing Rate	5-10 million fps	ADC Dynamic Range	10 Bit
Front Optics	Single objective lens system (no parallax)	Device Type	Variable resolution progressive scan CMOS Sensor Monochrome
Objective Lens	C-mount or Nikon F-mount	Interface	Gigabit Ethernet for camera control and image transfer
Resolution	1K x 1K pixels	Dimensions	127 mm x 166 mm x 234 mm
Pixel size	10 μ m pitch	Weight	1.9 Kg (4 lbs.) - w/o lens

FRAME CAPACITY

Resolution	1Kx1K	512x512	333x333	256x256	200x200	170x170
Frames per burst						
Max frames @ 5-10M fps	1	4	9	16	25	36

PRELIMINARY SPECIFICATION: SUBJECT TO CHANGE