

# Genie™ TS

## World's Most Versatile GigE Vision Camera

Teledyne DALSA's new Genie TS combines the latest image sensor technology—including Teledyne DALSA's own advanced CMOS devices—with a newly optimized camera platform that delivers the widest, most powerful feature set ever in a GigE Vision camera.



**Genie™ TS**  
Next Generation  
Camera Platform

[www.teledynedalsa.com/GenieTS](http://www.teledynedalsa.com/GenieTS)

### SENSOR CONTROL

- Up to 12 megapixel resolution
- Higher frame rates in burst and partial scan mode
- High Dynamic Range
  - Multi-slope function
- Binning
  - Horizontal and vertical
- Auto-Brightness Control
  - Auto-exposure
  - Auto-gain (AGC)
  - Auto-iris
- Multiple Exposure Times
  - Different exposure times per image
  - Cycling method is user-controllable
- Multiple Gains
  - Different gain settings for every image
  - Cycling method is user-controllable
- Moving ROI
  - New ROI positions for every image
  - Cycling method is user-controllable
- Cycling Modes
  - Cycling of feature values can change upon software command every x number of frame(s) or on an external input signal

### DATA PROCESSING

- Multiple Flat Field Correction (FFC) with pixel correction
  - Different FFC per image
  - Cycling method is user controllable
- Multiple look-up tables (LUT)
  - 4 available LUTs (mono)
  - 1 RGB and luminance LUT (color)
  - Different LUTs per image
- Motion Detection
  - Image capture based on motion detection
- Color Correction
  - Color balancing with CCT preset
  - Auto-white balance (or manual control)
  - Color space conversion
- Image Filtering
  - Smoothing /sharpness filters for monochrome models
- Image Compression
  - JPEG format, user-controlled parameters

### I/O VERSATILITY

- Networking
  - Gigabit Ethernet interface
- Power over Ethernet (POE)
- Auxiliary Input Power
  - 12 - 24V input
- I/O
  - 4 general purpose outputs
  - 4 general purpose inputs with programmable thresholds
- Auto-Iris
  - 4-pin connector for video or DC iris
  - Motorized iris control available on the 25-pin micro-D connector
- Motorized Lens Control
  - Zoom and focus control available on the 25-pin connector
- Serial Control
  - RS-232 and RS-485 serial port output offers remote access from PC to serial devices around the camera (like PTZ)
- General Purpose Timer and Counter
  - Generate events based on user defined timer or counter

### ADVANCED CAPABILITY

- Meta Data
  - Latches current camera values with images, including timestamp, exposure, and more
- Image-On-Demand
  - Auto mode – automatically send images to PC as acquired
  - Manual mode – camera can store acquired images in memory and transfers when needed
- Pre-Trigger
  - Loop buffer functionality allows acquisition of multiple images BEFORE (and after) the actual trigger event
- Multicasting
  - Image multicasting – images sent out to multiple computers for parallel processing
  - Simultaneously control multiple cameras with a single software command
- IEEE1588
  - Built-in feature for multiple camera synchronization
  - Precise time protocol – time stamping images with microsecond accuracy