Overview

Small compact GigE Vision camera with uncompromised image quality.

The Genie TS-M1920 uses the Cmosis CMOS, CMV2000 Monochrome HD format sensor with a resolution of 2048 x 1080. Teledyne DALSA’s “Burst Mode” feature allows for image capture rates of 70 fps in 2M pixels resolution while maintaining exceptional image quality. The Genie TS-M1920 takes advantage of gigabit Ethernet technology, transmitting data over standard CAT-5e and CAT-6 cables to distances of up to 100 m. Like all Genie cameras, the TS-M1920 is based on AIA (Automated Imaging Association) GigE Vision Standard to directly link the camera to a PC.

Key Features

- Uses standard PC Ethernet port & hardware
- Supports cable lengths up to 100 m (CAT-5e or CAT-6)
- Simplified set-up with field proven Sapera Essential software featuring CamExpert
- Engineered to accommodate industrial environment with a Ruggedize, screw mount, RJ-45 connector
- Auto-Iris (Video, DC or Motorized)

Programmability

- Higher frame rates achievable in partial scan mode and Multi-ROI support (with up to 16 ROI)
- Global electronic shutter with exposure Control
- Auto-Brightness Feature
- Extended Dynamic Range Function
- On-board flat-field correction
- Multi-Exposure Feature
- Programmable LUTs
- On-board Image compression
- Transfer On-Demand Function
- IEEE1588 Precise time Protocol

Typical Applications

- Electronics manufacturing inspection
- Industrial metrology
- Intelligent traffic systems

Specifications

- **Active Resolution**: 2048 x 1080
- **Acquisition Frame Rate**: 70 fps
- **Data Output Transfer**: Gigabit Ethernet, also supports 100 Mbps
- **Pixel Size**: 5.5 μm
- **Data Format**: 8 and 10-bits
- **Exposure Control**: Automatic, Programmable, or via External Trigger
- **Dynamic Range**: 58 dB
- **Gain Control**: Automatic, Manual
- **I/O Ports**: 4 opto-isolated input, 4 opto-isolated output, 3 motorized Control, RS-485 Port, and RS-232 Port
- **Image Buffer**: 512MB of On-board memory
- **Lens Mount**: CS-MOUNT
- **Size**: 49 mm x 49 mm x 54 mm
- **Mass**: ~196 g
- **Operating Temp**: -20 to +60c
- **Power Supply**: 12 to 24V or Power Over Ethernet (POE)
- **Power Dissipation**: -4.5 to 5.5W
- **Data Connector**: Standard or Screw mount RJ-45
- **Power and I/O**: Micro-D 25-pin and 4-pin auto-Iris
- **Regulatory Compliance**: FCC Class A, CE, RoHS 2004/105/EC
- **Camera Specification**: GigE Vision v1.2 Compliant
- **Software Platform**: Teledyne DALSA Sapera LT or 3rd Party Genicam Compliant SDK
- **Part Number**: G2-GM10-T1921 / G2-GM12-T1921 (Enhance NIR version)
All Genie cameras feature value added functionality designed specifically for imaging and machine vision applications. All features are easily accessible with Teledyne DALSA’s advanced software tools. These tools deliver superior image capture, performance, and control.