

ATS Illuminate™ Debug Solutions

Event-triggered video capture for automation system troubleshooting

Highlights

Faster problem resolution

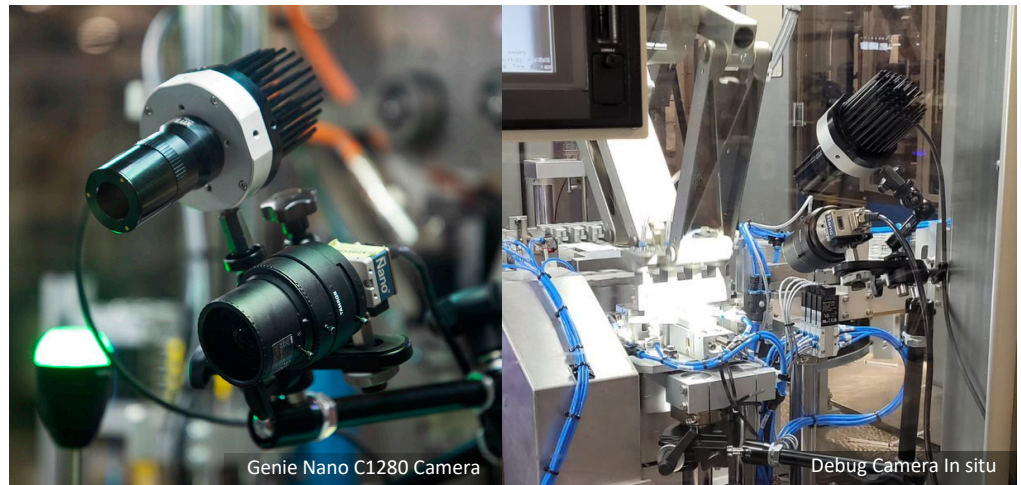
- Expedites troubleshooting of difficult to see or infrequent issues in automated manufacturing systems
- Provides video at the exact point of interest with pre-event and post-event video captured at the time of the fault condition

Ideal applications

- Fast moving manufacturing automation equipment
- Intermittent production faults or rejects that are difficult to observe

Camera options

- High speed: 1000 fps at 480x300 resolution
- High definition: 1080p resolution



Expedite Troubleshooting

Identifying the root cause of intermittent machine faults or part rejects can be an extremely manual and time-consuming process that can involve reviewing hours of video recorded at multiple stages in a manufacturing process.

The ATS Illuminate™ debug solution is an easy to use, patent-pending event-triggered video capture system that facilitates manufacturing process improvements, root cause analysis, and helps troubleshoot fast automaton equipment or infrequent process issues, which may be difficult to see with the human eye.

Play back the entire event at full speed or in slow motion, and view circumstances leading up to and following the event. Deploy the camera within machine guarding and monitor suspect stations or manufacturing processes remotely.

By pinpointing intermittent line issues, the ATS Illuminate™ debug solution expedites troubleshooting to enable quicker remediation and aids in the reduction of unnecessary production losses associated with the nuisance condition.

How It Works

1

Record high quality video of fast-moving automated manufacturing process



2

ALERT! – Machine fault occurs, email notification sent*



3

Playback relevant video footage immediately before, during and after the fault occurred



4

Understand issue and schedule repair to resolve



* Requires access to email server via enterprise network or internet.

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MANUFACTURING INTELLIGENCE

ATS™
GLOBAL SERVICE

Deployment and Configuration Options

The ATS Illuminate™ debug solution can be obtained as a standalone kit, complete with camera, mounting devices, and software embedded on an industrial PC, or deployed as an integrated module on the ATS Illuminate™ Manufacturing Intelligence software server.

Multiple cameras can be triggered using the capture system to track one or more event (e.g. fault, alarm, etc.). The cameras can also be set up to capture the same event from various vantage points based on a single trigger criteria. Several independent cameras can use multiple or overlapping triggers to capture a range of events at different times and locations.

Camera Options

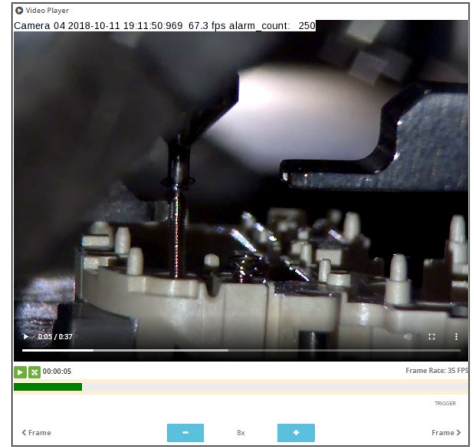
High Definition

Axis Q1615 Mk III network camera
Up to 100/120 fps (50/60Hz in 1080p (no WDR))
82mm x 58 mm x 195mm



High Speed

Genie Nano C1280
(includes additional industrial PC for video storage)
1000fps @ 480 x 300 resolution, 1 min pre-recorded time
213 fps @ 1280 x 1024 resolution
38.9mm x 29 mm x 44 mm (with lens adapter and connectors)



Replay the event at full speed or frame by frame in slow motion and view circumstances leading up to and following the trigger event.

Selection Criteria (or application considerations):

	Edge Standalone Debug Kits	Debug Camera Only Kits
Faster time to insight <ul style="list-style-type: none"> Event-triggered video capture expedites troubleshooting of difficult to see or infrequent automation issues Provides video at the exact point of interest with pre-event and post-event video captured at the time of the fault condition 	✓	✓
Software Included <ul style="list-style-type: none"> Pre-installed on industrial PC included in the kit 	✓	
Non-invasive Integration <ul style="list-style-type: none"> No PLC changes required, standalone kit communicates via included OPC UA server Does not impact line validation 	✓	No (See Note 1)
Portable <ul style="list-style-type: none"> After the issue is resolved, the video file can be saved, shared, or stored and debug camera kit moved to next station of interest 	✓	
Multiple cameras <ul style="list-style-type: none"> Triggered using one or more events from multiple vantage points 	✓	✓ (See Note 2)

Note 1: Illuminate Debug camera only kits require Illuminate™ Manufacturing Intelligence (IMI) software and the Debug Add-on module to be purchased and installed on the IMI server. Debug camera licenses remain with the IMI software server, so portability is limited.

Note 2: Full implementation of Illuminate™ Manufacturing Intelligence software has robust triggering, multi-camera support allowing multiple or overlapping triggers to capture a range of events at different times and locations. Plus, full IMI provides additional insights to leverage for troubleshooting.

For More Information

ATS Global Service is an industrial services provider that helps manufacturers control operating costs, reduce unplanned downtime, and maintain optimal performance over the lifecycle of their industrial automation systems.

To learn more, contact your ATS Automation or ATS Global Service account representative, or visit ats-service.com.

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