

BG-1000 Fire Smoke Damper Surveillance System

Product Data Sheet



Manufacturer: B & G Solutions
Model: BG-1000
Product Type: Remote Visual Surveillance & Testing System for Fire & Smoke Dampers
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Product Overview

The BG-1000 is a camera-based surveillance system designed specifically for remote visual monitoring of fire and smoke dampers in HVAC ductwork. It enables facility managers, safety teams, third-party inspection groups and

compliance officers to verify damper positions and physical functionality without access—streamlining required periodic inspections per NFPA 80, NFPA 105, and local fire codes.

High-quality BG-1000 assemblies are positioned to clearly view damper blades. A central controller and intuitive mapping software overlay damper locations directly on building floor plans for at-a-glance status monitoring and testing.

Key Features

- Visual confirmation of damper status (no reliance on mechanical switches reducing first cost of damper purchase and install)
- Remote testing capabilities from frontend workstation
- Centralized graphical dashboard with building floor-plan integration
- Secure remote access (web/app-based, multi-user with role-based permissions)
- Automatic alerts for unexpected movement, obstructions, or camera faults
- Timestamped and labeled photo/video logging
- Audit-ready compliance export files
- Reduced labor hours and cost performing inspections by on-site personnel and/or third-party contactors
- Reduced inspection time facilitates more frequent testing for increased damper reliability
- Greatly reduce infectious control risks by not having to open live duct systems
- Enables testing of fire/smoke dampers in an operational system proving functionality under normal operating conditions
- Scalable from small buildings to large campuses (dozens to thousands of dampers)
- Straightforward installation: cameras mount near/in ducts; compact wall/duct-mount controller





System Components

- Dome Surveillance Cameras - Specialized IP dome cameras (inferred, optimized for damper viewing)
- Networking – “Daisy Chain” capability with integrated network switch
- Monitoring Software – Operator Workstation interface with live views, Output testing, historical playback, mapping, and reporting

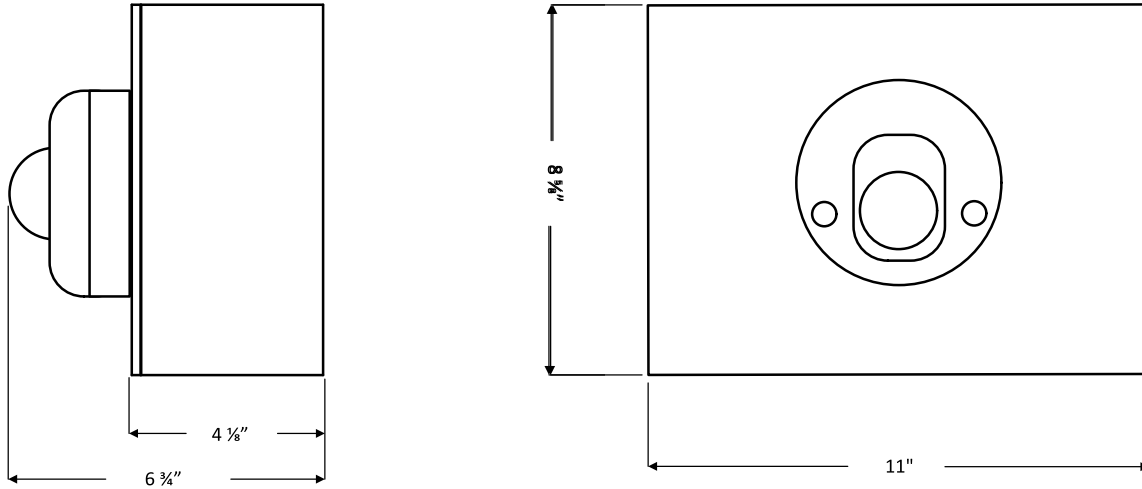
Technical Specifications

Category	Specification
Camera Resolution	Full HD 1080p (or higher)
Field of View	Optimized for damper inspection
Controller	BG1000 duct mount enclosure
Connectivity	Ethernet
Power Supply	24 VAC, 0.3Amps per assembly
Storage	Local SSD/Remote NVR
Operating Temperature	0°C to 40°C (32°F to 104°F)
Software Platform	Web-based or dedicated application
Compliance Support	NFPA 80 / NFPA 105 visual inspection requirements

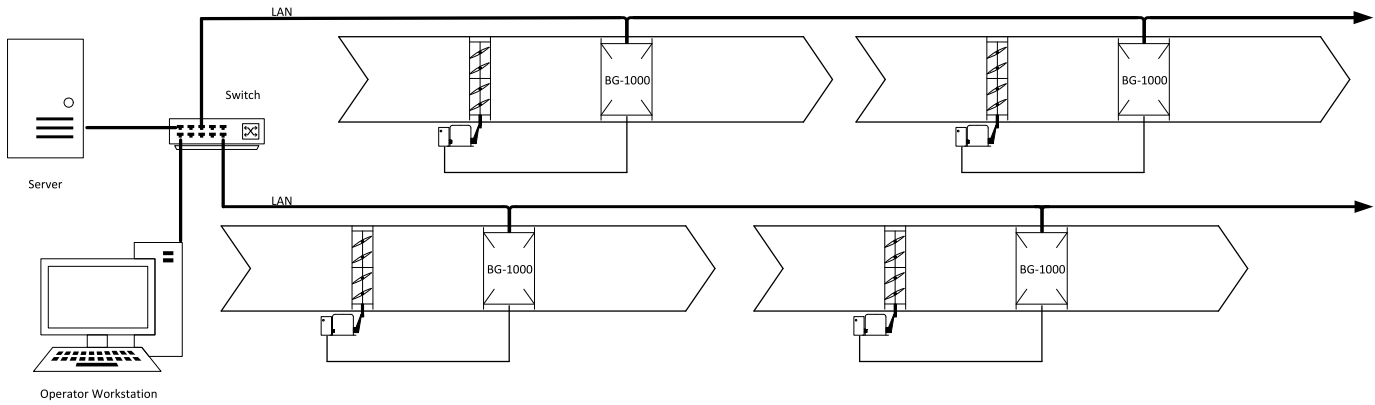




Mechanical Drawings



System Architecture





Key Benefits

- Dramatic reduction in labor and costs (eliminates most manual ladder/scaffold inspections)
- Enhanced personnel safety (avoids confined spaces, heights, and system shutdowns)
- Definitive visual proof of damper position (superior to end switch only systems)
- Proactive identification of stuck, damaged, or obstructed dampers
- Professional, time-stamped reports and visual evidence for AHJs and inspectors

Typical Applications

- High—rise office buildings
- Hospitals and medical facilities
- Schools, universities, and dormitories
- Hotels, convention centers, and shopping malls
- Data centers and mission-critical facilities
- Any structure with extensive HVAC fire/smoke damper requirements

Why Choose the BG-1000?

Traditional damper inspection is time—consuming, disruptive, and often hazardous. The BG-1000 modernizes the process into a reliable, visual, remote solution with physical damper actuation—improving compliance efficiency, reducing risk, and providing continuous surveillance between mandated test cycles.



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Patent Pending

Protecting What Matters Most Through Intelligent Visual Technology

