# GENERAL DESCRIPTION

* 1. The Nebula Emergency Management Platform is a comprehensive solution designed to streamline and enhance emergency response capabilities. Integrated with Blue Alert® software, Nebula provides a complete end-to-end solution for alerting, managing, and responding to incidents. This specification outlines the core functionalities, technical requirements, and performance standards for the platform.

# SYSTEM ARCHITECTURE

* 1. This cloud-based architecture must enable global connectivity, allowing devices from around the world to be integrated into a single, centralized platform.
	2. Cloud Platform: Amazon Web Services (AWS)
	3. Devices Supported: VoIP and analog device support
	4. Device Protocols: Session Initiation Protocol (SIP), Simple Network Management Protocol (SNMP)
	5. Connectivity:
		1. 256 Bit AES Encrypted VPN with support for inbound and outbound access to all devices connected to the router gateway (Blue Alert® Connect & Monitor) or
		2. TLS1.2 + SRTP (Blue Alert® Interconnect)
	6. Performance:
		1. Low latency for real-time communication and alerts
		2. High availability and reliability to ensure continuous service
		3. Scalability to handle increasing workloads and user demands
	7. Security:
		1. End-to-end encryption for secure data transmission
		2. Strict access controls to protect sensitive information
		3. Robust security measures to protect sensitive data
		4. Regular security assessments and vulnerability scanning
		5. Compliance with industry best practices and regulatory standards
	8. Subscriptions: Initial and renewal service subscriptions must be available in 12-, 24-, 36-, and 60-month terms.
	9. Updates and Support: Automatic platform updates and technical support must be included in the subscription package.
	10. Call Destinations: Must support calls routed within a company or organization (extension-to-extension) and/or external destinations (Public Switched Telephone Network (PSTN)).

# CORE COMPONENTS

* 1. The cloud-based platform must provide SIP registration, advanced call routing with line identification, connectivity and support for remote units, diagnostics and reporting, DID/e911, audio paging, secure connections, and unlimited scalability.
	2. Optional Managed Services shall be provided by the manufacturer/service provider.
	3. The system must support Blue Alert® Connect, a comprehensive administration software that serves as a central hub for managing VoIP devices. It must include a user-friendly web-based interface for configuring devices, routing calls, integrating with third-party systems, configuring multicast paging, and schedule automated paging.
	4. The system must support Blue Alert® Monitor, a versatile, real-time monitoring and reporting application that ensures optimal performance of connected devices. It offers robust features for fault, performance, and traffic monitoring, along with automated testing for speakers, buttons, and microphones. The web-based interface and RESTful API facilitate easy management and integration with other systems.
	5. The system must support Blue Alert® Motion, a cloud-based video platform that offers secure video-verification and event-based recording. It should automatically store Help Point® initiated videos in the cloud for a minimum of 90 days, enabling remote access and playback. Additionally, the platform must be capable of delivering notifications to smartphones or other devices for new recordings and provide a mobile app for accessing event-based videos from anywhere with an internet connection.
	6. The system must support Blue Alert® Portal, a web-based interface used to access application status, performance history, call logs, subscription status, and other data related to Blue Alert® software applications.
	7. The system must support Blue Alert® Overwatch, a comprehensive public safety solution that combines advanced analytics with emergency communication tools. It should leverage video gun detection, audio gunshot detection, emergency calling, and audio paging to enhance safety in various environments, such as campuses, stadiums, and public spaces.

# MANUFACTURER

* 1. The Manufacturer and service provider shall be Code Blue Corporation. 800-205-7186, 259 Hedcor Street, Holland, Michigan 49423. www.codeblue.com. THERE ARE NO EQUIVALENTS.