# GENERAL DESCRIPTION

* 1. The unit shall be a vandal-resistant, high quality, communications device, model LS1000 from Code Blue Corporation, no substitutions. It shall have a real time, non-open source, proprietary operating system. It shall have a single enclosure comprised of all electronics with a fixed IP color camera\*, serviceable speaker, microphone, button, and PCB components.

# CONSTRUCTION

* 1. The speakerphone shall measure 8.5” W x 11.75” H x 2.56” D with six screw holes and weigh approximately 4.93 lbs.
	2. The faceplate shall be constructed of 0.104” thick stainless steel with custom-designed, vandal-resistant camera\*, microphone and speaker openings.
	3. An 8.5” W x 11.75” H x 0.13” D rubber gasket shall be on the back of the faceplate.
	4. A stainless-steel screen shall be mounted between the faceplate and speaker for additional vandal resistance and weatherproofing.
	5. A 3.5” weatherproof speaker and optional keypad shall be mounted via .50” stainless steel studs, locking washers and lock nuts.
	6. A camera\* standard sensor unit shall be mounted with an aluminum recessed threaded mount.
	7. Piezoelectric buttons that are self-monitoring and contain no mechanical parts shall be mounted in a cast aluminum bezel via locking nut and rubber washer.
	8. Button bezels shall be made of acrylic with an aluminum back plate and mounted via stainless steel studs, locking washers and lock nuts.
	9. One .42” red LED light and one .42”green LED light will be utilized beneath CALL PLACED and CALL RECEIVED signals.
	10. Aluminum stand offs and locking washers shall be utilized to mount conformal coated electronics. A molded plastic housing shall be secured with aluminum standoffs, locking washers and stainless-steel screws. Weatherproof modular connectors shall be utilized for external power, auxiliary, PAS control, communication, audio output connectivity.

# FINISH

* 1. Faceplate shall have an optional four-coat paint process, with zinc-rich primer for corrosion resistance and baked-on polyurethane enamel for maximum gloss and shine.
		1. Optional clear coating process available to provide additional environmental protection.
	2. Flush mount: It shall be stainless steel with a 4b brushed finish.
	3. Surface mount: It shall be stainless steel with a 4b brushed finish.

# PRODUCT FEATURES

* 1. The enclosure shall be capable of using interchangeable faceplates: single button, two button, and two button with keypad.
	2. Self-monitoring and fault reporting for loss of power, PAS amplifier/speakers (if attached), battery voltage and button, speaker, microphone, and keypad failure. Built-in scripting language provides advanced button and diagnostic report programming.
	3. Fault reporting shall be by SNMP management system or by custom script for placing outgoing calls and message playback.
	4. The unit will have capability for infinite account registrations for flexibility.
	5. Security features include HTTPS with 10-minute login use timer, Transport Layer Security (TLS) redundant with HTTPS, VLAN and password protection.
	6. Message playback options: multiple and repeating during both call placed, and call received, and message playback during a call via DTMF commands.
	7. Operational temperature shall be -40° to +70° Celsius (-40° to +158° Fahrenheit).
	8. Built with powerful DSP technology with enhanced speakerphone and microphone sensitivity.

# COMMUNICATION FEATURES

* 1. The speakerphone shall be capable of peer-to-peer audio and multicast communication.
	2. The speakerphone shall have a 4GB memory capacity for the storage of phone numbers and audio messages and be capable of configuration from a central TFTP server or embedded web GUI.
	3. The speakerphone shall have an 8 Ohm line level audio output.
	4. The unit shall have three Ethernet ports, one capable of being connected to a PoE network switch.
	5. The speakerphone will be able to handle phone numbers with up to 255 digits each and have an instantaneous dialing speed depending on the network.
	6. In-call commands via DTMF: speaker volume and microphone volume.
	7. Codec support: G.711a (PCMA), G.711u (PCMU), G.722, G.729, GSM, L16, iLBC, Opus, Speex.
	8. STUN client for NAT transversal.
	9. UDP and TCP communication protocols.
	10. Embedded web server.
	11. DTMF inband/out of band/INFO.
	12. Three auxiliary Normally Open (NO) input contact closures and three auxiliary NO output contact closures with programmable timing capability.
	13. Customizable incoming call scripting.
	14. Volume control and hang-up functionality from both the caller and operator sides.

# ELECTRICAL

* 1. Power over Ethernet IEEE 802.3af (15.4 maximum wattage) and PoE+ IEEE 802.3at (25.5 maximum wattage).
	2. 12V DC @ 350mA for PoE and 600mA for PoE+.
	3. Optional SLA/AGM battery backup, with up to 16 hours of talk time/standby.
		1. Non-volatile memory ensures programming is retained during power loss.

# VIDEO\*

* 1. The faceplate should include a main unit designed for use in discreet video surveillance applications paired with a standard sensor.
	2. Main unit details
		1. 1080p at 60 fps or 720p at 180 fps
		2. Rugged design and connectors
		3. Multiple sensor and cable options
		4. Support for 2-way audio and I/O
		5. Reduced bandwidth and storage needs technology, advanced low-light technology and advanced WDR imaging
		6. Memory: 1024 MB RAM, 512 MB Flash
		7. Video compression: H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles; H.265 (MPEG-H Part 2/HEVC) Main Profile; Motion JPEG
		8. Resolution: 1920x1080 HDTV 1080p
		9. Frame rate: Up to 30 fps for 1080p (WDR mode); Up to 60 fps for 1080p; Up to 180 fps for 720p
		10. Video streaming: Multiple, individually configurable streams in H.264, H.265 and Motion JPEG
		11. Image settings: Contrast, brightness, sharpness, advanced WDR imaging technology, fixed orientation aid, white balance, tone mapping, exposure control, exposure zones, compression, rotation: 0°, 90°, 180°, 270°, mirroring, polygon privacy mask, control queue
		12. Application Programming Interface: Open API for software integration; ONVIF® Profile G and ONVIF® Profile S, specification at onvif.org
		13. Power: Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4; 10–48 V DC, typical 11 W, max 25.5 W
		14. Operating conditions: -40 °C to 60 °C (-40 °F to 140 °F)
		15. Storage conditions: -40 °C to 65 °C (-40 °F to 149 °F)
	3. Standard sensor details
		1. Up to 60 fps at 1080p
		2. Up to 180 fps at 720p
		3. 108° field of view
		4. IP66/IP67/IP6K9K-rated
		5. Ruggedized sensor unit can withstand temperatures as low as -40 °C and as high as 70 °C intermittently (-40 °F to 158 °F).
		6. Minimum illumination Color: 0.1 lux
		7. Day and night Fixed IR-cut filter
		8. Power: Typical 1 W, max 1.7 W
		9. Operating conditions: -40 °C to 60 °C (-40 °F to 140 °F)
		10. Storage conditions: -40 °C to 65 °C (-40 °F to 149 °F)

# OPTIONS

* 1. The LS1000 FP1 shall have a single 38mm self-monitoring data button for activation. The button shall be labeled PUSH FOR HELP, EMERGENCY, EMERGENCY/EMERGENCIA or ASSISTANCE. Also available without camera.
	2. The LS1000 FP2 shall have one 38mm and one 28mm self-monitoring data button for activation. The primary button shall be labeled PUSH FOR HELP, EMERGENCY, EMERGENCY/EMERGENCIA or ASSISTANCE. The secondary button shall be labeled INFO. Also available without camera.
	3. The LS1000 FP2K shall have one 38mm and one 28mm self-monitoring data button for activation and a standard telephone keypad. The primary button shall be labeled PUSH FOR HELP, EMERGENCY, EMERGENCY/EMERGENCIA or ASSISTANCE. The secondary button shall be labeled CALL. Also available without camera.
	4. Bezel Options:
		1. ADA Compliant Tactile 13-character max customizable bezel designs made of acrylic and aluminum shall be available.
		2. ADA Compliant printed customizable design made of acrylic and aluminum shall be available. (File required)
	5. Please refer to the associated Architect and Engineering Specification for the following equipment:
		1. Code Blue enclosure options for installation: Tower and Wall Mount
		2. Remote mount blue beacon/strobe

# COMPLIANCE

* 1. Braille lettering and two highly visible LED indicators for ADA compliance.
	2. NEMA 3S or 4 compliant when installed in NEMA compliant enclosure.
	3. UL 60950-22 compliant when installed in a Code Blue Help Point®.
	4. UL 62368-1 compliant when installed in a Code Blue Help Point®.

# WARRANTY

* 1. The LS1000 shall be warrantied against any defects in material and workmanship, under normal use, for a period of 2 years from date of shipment. If system is found by manufacturer to be defective within the warranty period, manufacturer shall repair and/or replace any defective parts, provided the equipment is returned to manufacturer.

# MANUFACTURER

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

*\*Available with Camera option Only*