SGX 5150 MD

IoT Medical Device Gateway

IMPROVE PATIENT CARE
MANAGE OPERATIONAL COSTS
ENHANCE PATIENT QUALITY OF LIFE

Optimize your healthcare operation with our highly versatile, and secure Lantronix® SGX 5150 MD IoT device gateway. Its advanced turnkey design provides everything you need to benefit from tracking hospital assets to managing critical patient data.

Improve Patient Care

The SGX 5150 MD enables healthcare professionals to access and monitor patients' health status in real-time. With accurate and on-demand insight into a patient's health status, doctors and nurses can deliver more personalized treatments and improve their patients' quality of life.

Strong Security with TruPort™

The SGX 5150 MD platform was designed to support critical assets and protect your operation from unauthorized access, giving you peace of mind that your data always remains secure. The SGX5150 MD is also protected from unauthorized, authenticated configuration and boot firmware.

Lower Operational Costs

The SGX 5150 MD facilitates the delivery of data to your private or public cloud infrastructure and mobile app so that you can track your organization's assets at all times. This increase in asset visibility substantially lowers the cost and likelihood of losing expensive medical devices. For expedited asset tracking, utilize the Lantronix Gateway Central management solution.

Past. Present. Future—All Covered

The SGX 5150 MD offers a future-proof path for connectivity to any medical device. It provides multiple interface options to connect to virtually any medical asset. The SGX 5150 MD supports legacy serial interfaces with a single or dual RS-232 ports, USB 2.0 with host and device modes and Ethernet interfaces.

High-Performance Wireless Connectivity

The SGX 5150 MD offers Bluetooth and Wi-Fi® connectivity. It is equipped with industry-leading high-performance 5GHz (802.11ac) Wi-Fi®, offering reliable, persistent wireless connections and bandwidth for high-speed data processing.

Perfect For:

Hospital   Clinics

EMS   ER

Feature Rich Turnkey Design

- Easily configure and connect to the enterprise network, out-of-the-box

- Unique Device ID feature allows you to make your device visible to authorized users

- Standards-based runtime services allow quick development and deployment of custom apps

- Experience the Lantronix industrial design quality and reliability

- Medical Electrical Equipment, Wi-Fi® Alliance

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Features and Specifications

Wireless Specifications

5G Wi-Fi (IEEE 802.11ac)
- 1x1 ac (MCS0 - MCS9)
- 20, 40 and 80 MHz Channels with optional SGI

IEEE 802.11 n
- 1x1 n (MCS0 - MCS7)
- 20 MHz and 40 MHz channel width with optional SGI

Advanced 802.11 n/ac Features
- Transit Beamforming
- Tx/Rx Low Density Parity Check (LDPC)
- Rx Space Time Block Coding (STBC)

Bluetooth/WLAN Coexistence

Compatible with IEEE 802.11 a/b/g and Supports IEEE 802.11 d/h/j/i

Dual band 2.4 GHz and 5 GHz
- 2.412 GHz - 2.484 GHz - Channels 1 - 14
- U-NII-1 (5.15 – 5.25 GHz) Channels 36, 40, 44, 48
- U-NII-2 (5.25 – 5.35 GHz) Channels 52, 56, 60, 64
- U-NII-2e (5.47 – 5.725 GHz) Channels 100 – 140
- U-NII-3 (5.725 – 5.825 GHz) Channels 149 - 165

Ethernet Specifications
- IEEE 802.3 MAC and PHY, 10BaseT and 100BaseT
- Auto-Negotiation/Auto MDIX, Full-duplex and Half-duplex

USB Specifications
- Configurable Host/Device USB 2.0 HS/FS port with USB type C connector
- USB configurable host can provide VBUS 5V 0.5A

Physical Interface
- (1 or 2) RJ-45 RS232 Serial Ports, with Baud rate up to 921 Kbps
- 15 KV ESD Protection
- (1) USB port – Type C Host / Device Connector
- (1) RJ-45 Ethernet port, 10/100Mbps, 1.5 KV Surge Isolation
- (1) Reset-to-default Button
- (1) WPS Button
- (1) Barrel jack for 12 VDC power input

LED Indicators
- System Status LED
- WLAN Status LED
- Wi-Fi Receive Signal Strength
- Indicator LEDs
- Ethernet Link/Activity LEDs (on RJ45)
- Serial Port TX/RX LEDs (on RJ45)

Protocols
- DHCP Client, DHCP Server, DHCPv6 Client
- uPnP (Discovery), LCAP (77FE), Telnet, (S)FTP, HTTP(S)
- IPv4/IPv6, TCP, UDP, ICMP, ARP, Auto-IP, DNS, SNMP v2/v3

TruPort™ Security
- FIPS 140-2 Level 1 Certification*

WLAN Security
- AES/CCMP and TKIP encryption, 802.11i
- WPA/WPA2 Pre-Shared Key (PSK) or IEEE 802.1X, AES-CCMP

Enterprise Security (WPA2-Enterprise)
- EAP-TLS
- EAP-TTLS (MS-CHAPv2)
- EAP-PEAPv0/EAP-MS-CHAP v2)
- EAP-PEAPv1
- EAP-FAST
- IPSec

Firmware Authentication and Secure Data Storage
- ECDSA 256-bit verification

Management Interfaces
- DeviceInstaller™
- Web Manager (HTML5 Browser HTTP/HTTPS)
- CLI (over serial ports, telnet or SSH)
- OTA Field upgradeable
- Supports SNMP v2, V3
- XML Configuration records via CLI or FTP

Wireless Features
- Soft Access Point
- Wi-Fi Direct
- Multiple Soft AP Connections
- Simultaneous Soft AP and Client mode
- Secure Com Port Redirector™

Environmental
- Operating Temp: 0º C to +45º C (32º F to 113º F)
- Extended Storage Temp: -40° to 85° C (-40° to 185° F)
- IP Rating: 20
- Relative Humidity: 5 to 95%, Non-condensing
- ESD tolerance: Contact Discharge= 4KV; Air Discharge=15KV

Power
- Input: DC barrel, 12 VDC from Medical Power Supply shipped with unit
- Power Consumption = 1.9W typical without USB Load
- Power Consumption = 5.5W max with
- USB Load
- Output: 5V / 500 mA via USB Type C connector (in Host mode) when used with the medical power supply provided

Certifications
- FCC, IC, EU RED, UL/CE, 60601-1, 60601-1-2 4th Edition.
- For a complete list of compliance details, refer to the SGX 5150 User Guide

Physical Dimensions
- Dimensions: 11cm (4.3 in) X 8.9cm (3.5 in) x 2.6cm (1.0 in)
- Weight: 0.35 kg (0.77 lb)

Warranty
- Industry-leading 5-Year Limited Warranty

Part Number	Description
SGX51501M2US	SGX 5150 MD Wi-Fi IoT Device Gateway, 1 Serial Ports, 802.11ac,10/100 Ethernet, USB with Power Supply Level 6 (ACC-520-160-R) and 2 antennas included in the box. North American Version.
SGX51502M2US	SGX 5150 MD Wi-Fi IoT Device Gateway, 2 Serial Ports, 802.11ac, 10/100 Ethernet, USB with Power Supply Level 6 (ACC-520-160-R) and 2 antennas included in the box. North American Version.
SGX51501M2ES	SGX 5150 MD Wi-Fi IoT Device Gateway, 1 Serial Ports, 802.11ac, 10/100 Ethernet, USB with Power Supply Level 6 (ACC-520-160-R) and 2 antennas included in the box. European Version.
SGX51502M2ES	SGX 5150 MD Wi-Fi IoT Device Gateway, 2 Serial Ports, 802.11ac, 10/100 Ethernet, USB with Power Supply Level 6 (ACC-520-160-R) and 2 antennas included in the box. European Version.

Accessories	Description
ACC-520-160-R	Medical-grade Power Supply, Desktop, 60601-1, 100-240VAC, 12VDC IA, EFF Level 6, 5.5*2. Imm Barrel, 150cm Cord, C14 AC Input, 0-40C, RoHS
ACC-500-216-R	Power Cord, Packaged, US, Hospital Grade, 250VAC, 10A, 8 ft, RoHS
ACC-500-217-R	Power Cord, Packaged, Europe, 250VAC, 10A, 8 ft, RoHS
ACC-500-218-R	Power Cord, Packaged, UK, 250VAC, 10A, 8 ft, RoHS
ACC-500-219-R	Power Cord, Packaged, Australia, Hospital Grade, 250VAC, 10A, 8 ft, RoHS
ACC-500-220-R	Power Cord, Packaged, Israel, 250VAC, 10A, 8 ft, RoHS
ACC-930-0150-00	Antenna, 2.4 & 5 GHz, 2.15 DBI, Reverse Polarity - SMA, RoHS Single Pack with boot (2pcs)
ACC-500-244-R	Cable, USB Type C to USB-A Male 2.0, 1000mm, BLACK, RoHS
ACC-500-242-R	Cable, RJ45 PLUG TO DB9M, ACC-500mm, 6 ft, BLACK
ACC-500-243-R	Cable, , RJ45 PLUG to DB15M, ACC-500mm, 6 ft, BLACK
ACC-500-245-R	Cable, RJ45 PLUG TO DB9F, ACC-500mm, 6 ft, BLACK

Ordering Information

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