




A presentation on the best platform for language services

Proven at Fraser by a fully committed partner

A validated solution qualified by procurement for immediate use

- Regulatory & Practical Requirements
- Hardware Features and Specifications
- Shannon Operating System
- Platform Configuration and Support





U.S. Regulatory and Practical Requirements

Phrazer/Kitsune is the only purpose built hardware/software for medical use. There is only one solution designed to meet infectious disease control standards, work safety standards, medical privacy requirements and the only to meet Civil Rights requirements.

Phrazer/Kitsune is highly shielded for electronic emissions, designed with the highest quality components, incorporates highest speeds and most relevant features.

Disease Safety

CDC
[Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008](#)
[2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#)
[Management of Multidrug-Resistant Organisms in Healthcare Settings, 2006](#)
[Guidelines for Environmental Infection Control in Health-Care Facilities](#)
[Guideline for Infection Control in Health Care Personnel](#)
[Healthcare Workers](#)
[Methicillin-resistant Staphylococcus Aureus \(MRSA\) Infections](#)

OSHA
[Personal Protective Equipment standard \(29 CFR 1910.132\)](#)
[Bloodborne Pathogens standard \(29 CFR 1910.1030\)](#)
[\(29 CFR 1910\)](#)

Workplace Violence Safety & HIPAA Privacy

[Enforcement Procedures and Scheduling for Occupational Exposure to Workplace Violence](#)
[NIOSH Current Intelligence Bulletin #57: Violence in the Workplace: Risk Factors and Prevention Strategies](#)
[Guidelines for Preventing Workplace Violence for Health Care and Social Services Workers \(EPLUG | MOBI\), OSHA Publication 3148, \(2015\).](#)
[Violence Occupational Hazards in Hospitals U.S. Department of Health and Human Services \(DHHS\), National Institute for Occupational Safety and Health \(NIOSH\) Publication No. 2012-118, \(February 2012\).](#)
[Workplace Violence Prevention for Nurses, U.S. Department of Health and Human Services \(DHHS\), National Institute for Occupational Safety and Health \(NIOSH\) Publication Number 2013-155.](#)

HIPAA & Privacy
[45 CFR Part 160 and Subparts A and E of Part 164](#)
[Statement of Delegation of Authority to the Office for Civil Rights \(PDF - PDF\)](#)

Meet the clear FDA standards for infectious disease control, safety and privacy that are not met by consumer devices
Phrazer Kitsune is here to give you the digital engagements needed while exceeding the Infectious disease standards
required

With Phrazer/Kitsune health information isn't on a compromised platform (keep you safe)

The 1964 Civil Rights Act is a Constitutional right as is the ADA of 1991 (it matters) and Phrazer/Kitsune gets you
there

Canadian Regulatory and Practical Requirements



Phrazer/Kitsune is the only purpose built hardware/software for medical use. There is only one solution designed to meet infectious disease control standards, work safety standards, medical privacy requirements and the only to meet Patient Rights requirements.

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Public Health Agency of Canada

<https://www-lex.justice.gc.ca/eng/regulations/docr98-282/page-1.html#h-1021337>

<https://www.canada.ca/en/public-health/services/reports-publications/disease-prevention-control-guidelines.html#infection>

[Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings \(2013\)](#)

<https://www.canada.ca/en/health-canada/corporate/about-health-canada/activities-responsibilities/strategies/initiatives.html>

[Prevention and Control of Occupational Infections in Health Care \(2002\)](#)
(PDF document)

<https://www.canada.ca/en/health-canada/corporate/about-health-canada/activities-responsibilities/strategies/initiatives.html>

[Federal/Provincial/Territorial Public Health Response Plan for Biological Events](#)

[International Health Regulations \(IHR\) \(2005\)](#)

<https://www.patientafetyinstitute.ca/en/Pages/default.aspx>

[Quarantine, Travel Medicine and Migration Health Programs](#)

BC Categories

https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/indigenous-people/aboriginal-peoples-documents/calls_to_action_english2.pdf

<http://www.health.gov.bc.ca/library/publications/year/2017/BC-guiding-framework-for-public-health-2017-update.pdf> (Page 10 on equity)

<http://www.phsa.ca/health-professionals/professional-resources/office-of-virtual-health>

<https://www.cma.ca/its-future-health-care-delivery-task-force-begin-work-national-strategy-virtual-care>

Health & Workplace Privacy

https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/02_05_d_15/
[The Personal Information Protection and Electronic Documents Act \(PIPEDA\)](#)

[Provincial privacy laws](#)

- Health related
- Employment related

Canadian Centre for Occupational Health and Safety

<https://www.ccohs.ca/products/publications/wellness.html>

There are clear standards for infectious disease control, safety and privacy that can not be met by consumer devices

Phrazer Kitsune is here to give you the digital engagements needed while exceeding the Infectious disease standards
required

With Phrazer/Kitsune health information isn't on a compromised platform (keep you safe)

Patient rights, human rights and workplace rights are fully realized with this new purpose built platform



Phrazer Spirit | Uncompromised, Qualified Hardware Leader





Ruggedized, fully antimicrobial casing. Chemical resistant and completely sealed. Safety for staff and patients.



High definition camera/microphone for images, video conferencing, ID card, credit card and badge reading.



High resolution screen with touch interface that works with medical gloves.



American designed, patented, made to FDA medical grade specifications with fair labor, military grade security, medical OS and no 3rd party requirements.



Staff alert and patient interaction LEDs with multiple speed and color variations.



Industry leading processor package, massive memory stack, industry leading hardware encryption, full WiFi & cell network and closed system functionality.



Hot swappable batteries for week long power, in elegant CITE articulating handles with tactile vibrators.



- **Purpose designed and built for medical use**
- **Fully antimicrobial casing, completely sealed and no surfaces for pooling**
- **Unlimited battery life for 100% uptime**
- **Industrial components ruggedized casing and 10yr services life design**
- **Highest capacity memory stacks and fastest processor capabilities**
- **US/Canada made to FDA standards**


Industrial Grade components, elite level technology

Intrinsically safe (can not ignite gases like consumer systems) and fully sealed

Keeps your staff and patients safe from infectious disease transfer without disposables or wipes


Special medical features such as LED notifications and the Multipath Realtime Messaging


Phrazer Spirit | Uncompromised, Qualified Hardware Leader





FCC and Industry Canada certified Wi-Fi/BT Module

As the most cutting-edge medical journey solution ever created, the Phrazer/ Kitsune platform is also a leader in hardware performance. In bench tests Phrazer Spirit is in the top 1% of speed, storage performance, connectivity performance and uptime reliability. The rugged, uncompromised system is fully industrial grade and ready to server out-of-the-box.




Powerful CPU & SOM

Phrazer Spirit's 64-bit quad-core CPU leverages a Coordinator System Manager as an intelligent resource management tool that extends control of task scheduling and power management across the entire processor. The speed, reliability and performance will outperform any consumer system for medical use.



Super Charged Hexagon DSP

The super charged Digital Signal Processor enables the CPU to offload many tasks for more efficient processing. Featuring Fully Responsive Adaptive technology, the DSP also enables ultra-low power "always-on" sensors and advanced low power-image processing.




High Speed, High Volume, High Security

Spirit has the fastest memory response in its class. In medical engagements where immediate responsiveness is required, this access speed ensures the greatest reliability.


Medical facilities don't have unlimited bandwidth, or endless WiFi build outs so having Edge technology with on-device capacity is the only way to serve efficient engagements and entertainment in facility.

The NAND/SSD memory stacks on Phrazer Spirit incorporate the strongest hardware encryption in the market on the totally secure Shannon OS.



Unlimited battery, hot-swapping

With Qualcomm® Quick Charge™ 3.0, users can spend less time charging and more time doing. As our fastest and most efficient charging technology yet, Quick Charge 3.0 is 4x faster than conventional charging and 38% more efficient than Quick Charge 2.0.



Immersive CITE Engagements


CITE leverages simultaneous video, realtime multi-path audio, data flow, graphics and animation for totally attention grabbing engagements. The specialty memory, multi-threaded processes leverage the most advanced integrated media processors.

Benchmarks above consumer devices

Industrial components that don't have planned obsolescence

Fully industrial grade and ruggedized

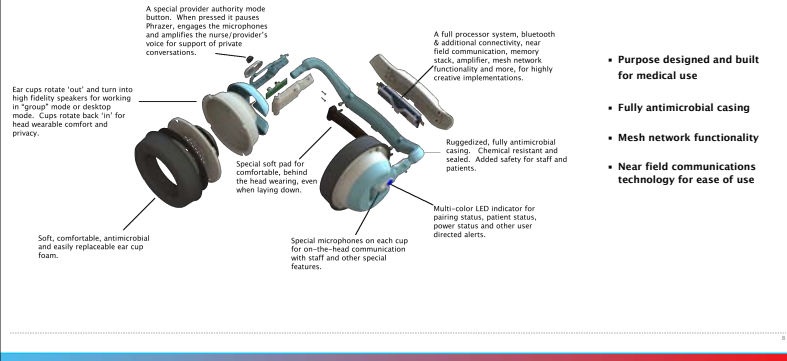
All modernized standards and streamlined Hardware/OS design

 Phrazor Spirit Specifications	
CPU CPU Clock Speed: 1310 to 2.2 GHz CPU Cores: 8x64-bit CPU, Quad-core CPU CPU Architecture: 64-bit	Peak GARM: 250 GARM Wi-Fi Features: MU-MIMO, Multi-gigabit Wi-Fi Bluetooth Bluetooth Version: Bluetooth 4.1 CITE MRM: Multipath real-time messaging and BLE
Process Process Technology: 14 nm DSP DSP Technology: 680 DSP, Qualcomm AI-Ways Aware™ Multi SIM: LTE Dual SIM Dual Standby (DSDS)	NFC Near Field Communications: Supported Location Satellite Systems Support: BeiDou, Galileo, GLONASS, GPS Location Support: Qualcomm® Location Critical Emergency Services Support: Assisted GPS, OTDOA (LTE-based positioning)
LTE Category Standalone LTE Category: LTE Category 12 Uplink LTE Category: LTE Category 13 LTE Downlink Features Downlink Carrier Aggregation: 3x20 MHz carrier aggregation Downlink GARM: Up to 250 GARM	Advanced Location Features: Sensor-assisted Navigation, Low Power Geo-fencing and Tracking, Pedestrian Navigation RF RFMS: Qualcomm® RF Front-End (RFFE) solution
LTE Uplink Features Uplink Carrier Aggregation: 2x20 MHz carrier aggregation Uplink GARM: Up to 64 GARM LTE Speed LTE Peak Download Speed: 600 Mbps LTE Peak Upload Speed: 150 Mbps	USB USB Version: USB 3.0, USB 2.0 Camera Image Signal Processor: 14.08, 2x Image Signal Processor (ISP) Single Camera: Up to 28 MP Camera Features: Clear Sight™ camera features Video Capture (28 FPS): 4K Ultra HD video capture
Wi-Fi Wi-Fi Standards: 802.11a/c, 802.11ac Wave 2, 802.11a/b/g, 802.11n Wi-Fi Special Bands: 2.4 GHz, 5 GHz, 60 GHz Peak speed: 867 Mbps Channel Utilization: 20/40/80 MHz MIMO Configuration: 2x2 (2-stream)	Video Video Playback: Up to 4K Ultra HD video playback Codec Support: H.265 (HEVC), H.264 (AVC) Display Max On-Screen Display: 4K Ultra HD Max External Display: 4K Ultra HD
	General Audio Audio Technology: Apple™ audio technology Audio Playback Playback Dynamic Range: 130dB Total Harmonic Distortion + Noise (THD+N): Playback: -105dB Sampling, Playback: 44.1kHz, 48kHz PCM, Playback: Up to 192kHz/24bit Amplifier output power: Up to 4W Audio Recording Total Harmonic Distortion + Noise (THD+N): Record: -103dB Sampling, Record: Up to 192kHz/24bit Recording Dynamic range: 105dB GPU API Support: OpenGL ES 3.2, OpenGL™ 2.0 full, Vulkan® 1.0, DirectX 12 Power Consumption Audio playback: 250mW for high performance mode Low power voice activation: 0.05mW Security Support Security Features: Malware Protection, Content Protection, Device Lock Authentication, Mobile Security, Processor Security Memory Memory speed: 10880Mbps Memory Type: LPDDR4X, Dual-Channel Storage SSD: Up to 16TB high speed memory eMMC, UFS 3.1 UFS: UFS 3.2 SD: SD 3.0 (UHS-I)

Specifications that exceed all market standards

Proprietary and interoperable for rapid and long term integration

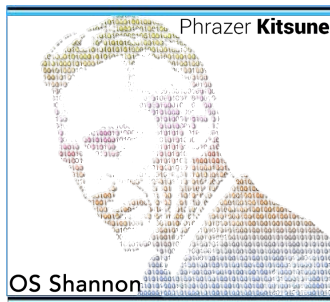
Fast, huge memory and highly efficient single source design



Fully integrated and dynamic interfacing

White listed private pairing and single purpose use

Completes the medical grade system and single source efficiency (no 3rd parties)



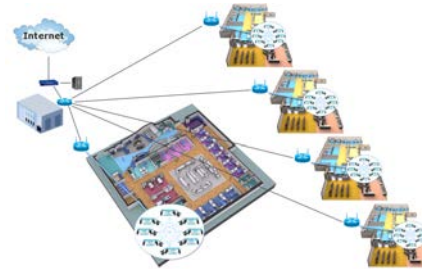
- Purpose designed and built for medical use
- Unmatched high responsiveness, streamlined design
- Never hacked, military grade encryption, single source development isolation model
- Out-of-the-box interoperability with all major medical record systems
- Breakthrough Multipath-Realtime-Messaging (MRM) technology
- Fully private Near Field Communication (NFC) controllers
- Remote web application configuration, reporting and tracking

The highest security operating system in the world

Secure closed loop development and management platform

Unique 'medical only features' and function that enable immediate 'bring up' and easy configuration

The self-generated, secure mesh network renders useless the expensive wire runs, redundant switches, load balancing equipment and months if installation.



A full hospital "bring-up" is fast, light weight and efficient

Mesh Network


Phrazer/Kitsune generates a self contained, secure private mesh network out-of-the-box

Fast, Stable Implementation


A simple access point for zones (subnets) and Internet pipe connection for live services (VPN gets you EHR live)

Low Impact, High Efficiency


No wire runs, special switches and routers needed; saving millions and months



The Purpose Built Medical Journey Platform



- Qualified (infectious disease, FDA, safety & security)
- Lowest Total Cost of Ownership (TCO)
- CITE designed benefit (built to human factors)
- A new platform for rapid, safe, broad innovation
- Higher performance levels than consumer systems



Total Cost of Ownership (TCO) at customers' implementation:

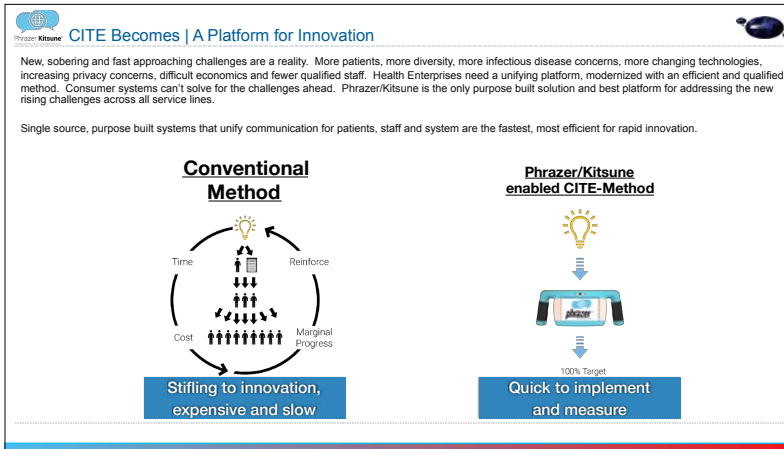
<ul style="list-style-type: none"> • Network integration • Infection compliance • Disposables • IQC, IPQC, OQC, and QA* • Content development 	+	<ul style="list-style-type: none"> • Maintenance • Replacement • Up-Time performance • Content changes • On platform development 	+	<ul style="list-style-type: none"> • Workflow integration • Staff training • Patient training • Utility integration 	+	<ul style="list-style-type: none"> • Workflow integration • EMR integration • Population integration • Ongoing upgrades 	= TCO
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IPQC: In-Process Quality Control
OQC: Outgoing Quality Control
QA: Quality Assurance

A purpose built system needs no modifications, has near zero risk exposure and and no multi-source agreements

The platform self updates, meets medical and ISO standards out-of-the-box

Novel platform with engagements that are reusable, and adaptation is performed at no cost and no delay



Becomes
Innovating on Phrazer/Kitsune is fast, easy and effective.

Phrazer/Kitsune has proven it can do much more...
Repeatedly proves the ability to quickly and effectively implement innovation.

Staff isn't adversely impacted with added use cases

The product can be expanded quickly and effectively throughout the system by single point

Immediate continuity and quality of care with best bedside manner every time

- **Purpose built US/Canada produced solution**
- **Outperforms any consumer system for speed, stability and capabilities**
- **Lowest Total Cost of Ownership (TCO)**
- **Safest for infectious disease control, data security**
- **A qualified, proven platform for rapid, safe, broad innovation**
- **A totally committed supplier with healthcare transformation expertise**

Phrazer/Kitsune is a 100% guarantee the staff/patient/system experience will be equitable and of the highest quality



The World Leader in Medical Journey Solutions

- **World's best patient engagement coverage and accuracy of information.** Personalizes to any age, language, literacy, gender and culture.
- **The only purpose built and qualified medical engagement platform.** Antimicrobial, secure, intrinsically safe and benchmarks faster than consumer devices.
- **Normalizing the patient population opens effective process improvement opportunities never before possible.** Over 10,000,000 qualified in market engagements at 99.9% accuracy.
- **Inventive new language, opportunity and innovation**
CITE Systems have the lowest cost of service and ownership in the market as a result of novel technology and application.

**World Leader in Journey Solutions for:
Harmonizing Patient, Staff and System Performance**



Simply the best and here, committed to Healthcare



- **Total patient equity with continuity and quality of service, Patient Rights solution & better efficacy**
- **Qualified, purpose built platform and regulatory covered**
- **The only platform for safe and meaningful medical innovation that supports patients, staff and system**
- **Rapid, safe, inexpensive, proven, broad innovation**
- **Committed, innovative, single source Company**
- **US/Canada designed, built, managed and delivered**

Phrazer/Kitsune will make faster, more accurate and equitable patient services a reality
The platform is safe, secure and supported by a local company committed to Health and Patients
The economics are undeniable as is the efficacy, accuracy and innovation potential
There is a low to no cost model for Health Enterprises