JANUS REMOTE COMMUNICATIONS

Janus Hardware Building Blocks

SMT Embedded Modems

'X' Footprint
(XF) Embedded Modems

Common Footprint (CF)
Embedded Modems

T2 Cellular
Gateway

400AP
Cellular SBC

T3 Cellular
Terminal

POTSwap
POTS Replacement

We do IoT — From Idea Through Integration
www.janus-rc.com

Janus Remote Communications has provided custom and off-the-shelf products and solutions for the global IoT marketplace since 2002. Our significant internal design and manufacturing resources, coupled with our experience in diverse communications technologies, helps us to create original and pragmatic solutions for customer application requirements.

Janus offers numerous IoT "Building Block" products enabling customers to quickly and easily build their own IoT solutions. Our North American and International regulatory certifications helps customers quickly and cost effectively move their products and solutions to market – circumventing the arduous and expensive carrier end device certifications.
www.janus-rc.com

Besides our standard OTS products, Janus offers solutions and services in these areas:

System Architecture	*Hardware Design*
Firmware Design	*Database Design*
Applications Software	*User Interface Tools*
Hardware Manufacturing	

Applications

Fleet Management	*Telematics*
Asset Tracking	*Remote Monitoring Systems*
Security Systems	*Remote Meter Reading*
Telemetry	*Vending Machines*

Supported Cellular Wireless Technologies

HSPA+	LTE CAT 4	LTE CAT 1
LTE CAT-M1	NB-IoT	

CONNOR WINFIELD
HCW

Janus Remote Communications is part of the Connor-Winfield Corporation group of companies.

For over 50 years, Connor-Winfield has been providing electronic hardware, software/firmware, and manufacturing solutions to companies around the world.

JANUS REMOTE COMMUNICATIONS

Janus Embedded Modems

Common Footprint (CF) Embedded Modems

LTE910CF CAT1, CAT4 and CAT-M1

The Janus line of CF Embedded modems are carrier end device certified, footprint compatible, GNSS enabled, embedded modems for use in communication networks. They were specifically designed to provide customers with cost effective modems that are easily integrated into new and existing designs, require limited customer certification resources, and are interchangeable to allow for maximum network flexibility while removing the worry of product obsolescence. Their "end product" carrier certification allows users to integrate any cellular CF modem into their application with no further carrier certification requirements.

- Operating Temperature: -40°C to +85°C
- Input Voltage Range: 4.75 to 5.25Vdc (5.0Vdc Nominal)
- Dimensions: 2.5" x 1.4" x 0.325"
- GNSS Availability
- Carrier Certified: AT&T, Verizon, Rogers
- Regulatory Approvals: PTCRB, FCC, ISED Canada

Embedded Cellular XF Footprint Modems

LTE910XF CAT1, CAT4 and CAT-M1

The Janus line of XF Cellular Embedded modems, based on industry standard 20-pin connector footprint, are small, cost effective, PTCRB and carrier certified "end product" modems available on the market today. They are specifically designed to provide customers with cost-effective products that are easily integrated into new and existing designs. Their "end product" carrier certification allows users to integrate any cellular XF modem into their application with no further carrier certification requirements.

The XF Footprint Embedded Modems combine the full features and functionalities of cellular modules with the flexibility of a Socket DIP design, sharing the same 20-pin footprint and offer users the ability to easily configure their applications for communications via any cellular protocol worldwide.

- Industry Standard 20-pin Connectors
- PCB Mount
- Size: 1.14" x 1.3" x 0.256"
- Temp Range: -40°C to 85°C
- Input Voltage: 3.5 to 5.5Vdc
- Carrier Certified: AT&T, Verizon, Rogers
- Regulatory Approvals: PTCRB, FCC, ISED Canada

"Companies with simple or even complex remote wireless applications will find a Janus product the perfect integrated cellular solution for their requirements", states Dave Jahr, General Manager of Janus. "We design all our products with our customers in mind — to be cost-effective, feature and function rich."

CellBridge™

The **Janus CellBridge™** family of Global IoT solutions provide our customers with powerful new hardware, software and connectivity tools to quickly and easily integrate certified cellular modems into their end applications, giving them unrivaled operation, monitoring and control features and functions.

CellBridge Hardware

Janus offers customers several different **CellBridge™** hardware platforms to meet their end application integration requirements. All modems, terminals and gateways are PTCRB, RED and North American carrier "end device" certified for use in 4G LTE CAT-M1 and NB2 (NB-IoT) cellular communication network applications.

The **CellBridge™** devices provide customers with cost-effective products that are easily integrated into new and existing designs. Their "end device" classification allows users to integrate any certified **CellBridge™** device into their end application with little or no further regulatory or carrier requirements globally.

Telit ONEEDGE®

Telit offers ME310G1-WW and ME910G1-WW with OneEdge, a software suite integrated with deployment and management tools to address the complexity expected with the exponential growth in the number of IoT devices. The following components include:

- Lightweight M2M protocol enables comprehensive device management, FOTA updates and application enablement of low-power devices with the goal of more robust and secure connections.
- Telit simWISE™, a module-embedded SIM technology, enables reduced footprint, streamlined manufacturing and logistics, secure communications for connected devices.
- Telit IoT AppZone can run code and applications directly inside the Telit module.
- Telit's Connection Manager automates operations for connection to cellular networks.
- Location services provide the position of devices even in the absence of a GNSS connection.

CellBridge™ Enclosed Cellular Modems!

LTE910T3 v20.00 T3 Enclosed Terminal

LTE910T2 v20.00 Enclosed Gateway with Cortex M4 Processing Power

LTE400AP v20.00 Enclosed Edge SBC with Advanced Connectivity

See Page 4 for more information

LTE310SMT v1.00 CAT-M1/NB2 Global Cellular Modem

The Janus **CellBridge™ SMT LTE310SMT v1.00** LGA surface mount embedded modem makes it easier than ever for customers to integrate 4G LTE cellular technology into their end applications. They are specifically designed to be machine placed during the pick & place production process.

No more hand assembly or pin connection issues in the field.

The **LTE310SMT v1.00** can be deployed globally with their dual mode LTE Cat M1/NB2 (NB-IoT) and 2G fallback frequency bands. They are highly recommended for new designs and are an ideal migration path for existing 2G or 3G devices. Both current and updated designs benefit from a significant extension in life cycle with LTE Cat M1/NB2.

LTE910CF v20.00 CAT-M1/NB2 4G Cellular Modem

The Janus **CellBridge™ CF LTE910CF v20.00** Common Footprint (CF) embedded modem makes it easier than ever for customers to integrate 4G LTE cellular technology into their end applications.

The **LTE910CF v20.00** CAT-M1/NB2 Cellular Modem uses the Telit ME910G1-WW as its cellular engine and has global PTCRB, AT&T, Verizon and RED certifications. The **LTE910CF v20.00** units operate in CAT-M1/NB2 LTE 4G and 2G bands. (See bands on our website)

LTE910CF v20.00 modems are pin compatible with the full line of Janus' CF Embedded Modem Products.

LTE910XF v20.00 CAT-M1/NB2 4G Cellular Modem

The **CellBridge™ XF LTE910XF v20.00** CAT-M1/NB2 Embedded Cellular Modem uses the Telit ME910G1-WW as its cellular engine and has global PTCRB, AT&T, Verizon and RED certifications. The **LTE910XF v20.00** units operate in CAT-M1/NB2 LTE 4G and 2G bands (see bands on our website).

The full XF line shares the Industry Standard 20-pin connector footprint and is flexible in implementation - both into new product designs and with existing products.

JANUS REMOTE COMMUNICATIONS

Janus Hardware and Gateway Product Solutions

LTE910PS POTSwap

POTS Replacement – POTS to Wireless

The **LTE910PS** POTSwap allows land line telephones and modems to replace their POTS (plain old telephone service) connection with a wireless cellular connection. An internal land line modem allows legacy dial-up modem equipment to connect to remote TCP/IP networks. Fixed location voice applications can connect directly to the PSTN (Public Switched Telephone Network). Both dial-in and dial-out data and voice applications are supported.

An FXS connection (RJ11 jack) provides complete Central Office emulation including dial tone, ringing and busy signal generation as well as DTMF detection and generation. The POTSwap emulates all the functions of a wired telephone connection, is fully compatible with all common modem standards and can be configured to emulate all international telephone line standards.

Wireless connectivity is provided by the Janus line of Common Footprint (CF) Embedded modems, available for all cellular carriers.

LTE400AP Cellular SBC

The **LTE400AP** Open Platform Intelligent Cellular Terminals are complete wireless communication devices with integrated ARM9™ processors and expanded memory. They include Serial (RS-232/RS-485), USB and Ethernet connectivity with a voltage input range from 7 to 26 VDC.

- Incorporates Janus CF Modems
- Ethernet/USB/Serial Connectivity
- Embedded Linux OS
- 6 Exposed GPIOs
- Dimensions: 3.15" x 4.27" x 1.18"
- Ruggedized Aluminum Enclosure

Visit www.janus-rc.com to learn more about Janus Remote Communications!

Our website is your one-stop location for news, general product information, documentation, downloads, links and supplemental material regarding Janus products and services. We continually update our web resources to help you quickly and easily achieve your IoT application goals.

LTE910T3 - Serial/USB to Cellular Bridge

The **LTE910T3** is a low cost cellular terminal housed in a compact, rugged aluminum enclosure. Powered by 5 Vdc and offering USB and Serial connectivity, the **LTE910T3** allows for easy integration into any IoT application.

Incorporating carrier end device certified Common Footprint Embedded modems, the **LTE910T3** provides a hardware solution with direct access to the cellular network of your choice. External connectors allow the customer to choose the precise antenna for their application needs.

Designed specifically for IoT applications, the LTE T3 products are ideal for use in all telemetry and telematic applications including fleet and asset management, vending, security, alarm monitoring, and e-maintenance.

LTE910T2 Cellular Gateway

Our **LTE910T2** second generation Standard (T2) products are highly adaptable and cost-effective cellular terminals incorporating an embedded 32-bit Cortex M4™ 150MIPS processor with 256KB Flash/96KB+4KB RAM. The T2 offers standard serial and USB (OTG) connectivity, 4-20 mA current loops, an accelerometer, and an input power range of 7-28 VDC.

- Incorporates Janus CF Embedded Modems
- Operating Temperature: -40°C to +85°C
- Serial Connection (RS-232)
- USB (OTG)
- Operating Voltage: -7 to 28 VDC
- Ryton Enclosure
- Dimensions: 2.6" x 3.75" x 1.2"

Telit wireless solutions

Technology Partner

WIRELESS MODULES

Telit is the global leader in Internet of Things (IoT) enablement. Telit offers the industry's broadest portfolio of integrated products, platforms and services to support and enable IoT deployments from things to apps. Our portfolio of modules addresses all cellular communication technologies, GNSS and short-to-long range wireless applications. Telit modules are marketed and deployed worldwide.

Telit is in it.

For more information about the Telit, please visit **www.telit.com**.

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