# JANUS REMOTE COMMUNICATIONS





#### REMOTE COMMUNICATION AND

#### **Janus Remote Communications**

provides state of the art wireless products, services and custom design solutions for the global M2M marketplace. Our extensive internal resources coupled with our experience in all M2M technologies combine to create original and pragmatic solutions for your specific application requirements.

In addition, Janus offers numerous technologies enabling you to build your own M2M communication solution, including off-the-shelf products for an immediate, ready-to-perform solution.

Janus-RC.com offers a variety of wireless devices including GPS timing and navigation products, antennas and the Terminus GSM/GPRS terminal. www.janus-rc.com

### Smart Technology — Robust Solutions

**Janus** offers complete solution provider services including:

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

#### **Applications**

Remote Monitoring RFID Sensor Networking Smart Services Telematics Telemetry



#### **Janus Product Offerings**

#### Standard GSM864Q or CDMA864D Terminus

The standard Terminus modules are either a GSM/GPRS or CDMA terminal with all components required for wireless M2M communications in one compact, costeffective, stand-alone solution.

The quad band GSM864Q has additional functionality as a powerful GPRS modem with its intrinsic TCP/IP stack. It is available with or without GPS and with or without Python scripting capabilities.

Adaptable and easy to use, the GSM864Q is ideal for use in M2M

Telemetry and Telematic applications including fleet and asset management, vending, security, alarm monitoring, e-maintenance and other telemetry applications.

The Terminus CDMA864D is a communication control terminal with a compact enclosure that encapsulates everything needed for wireless M2M capability. Dual-band design allows for applications to be deployed on CDMA networks around the world.

The CDMA864D breaks through the barriers of M2M connectivity by minimizing investment and reducing total system costs. The terminal contains all circuitry required to operate on the CDMA network. External antenna connection enables the system integrator to meet application specific antenna mounting requirements. The CDMA864D allows for stand-alone use via industry standard interconnects or system integration via standard 50-pin 0.1" x 0.1" dual row header, further reducing the need for additional hardware costs. The CDMA864D ability to configure 9 GPIO as CMOS input or output makes the terminal both innovative and cost effective. The ease of application development and GPS integration also opens the door for further system cost reduction.

#### **Terminus 400AP Series**

Introducing the Terminus GSM400AP, CDMA400AP and UMTS400AP powerful, all in one M2M communication devices. Janus' latest addition to the highly successful Terminus family of products, the 400AP series, is a complete wireless communication device backed by ARM-9 architecture capable of 400 MIPS and controlled by Linux<sup>™</sup>



OS. This complete M2M single board computer is available with integrated GSM, CDMA or UMTS Plug-In modules. The 400AP is the evolution of M2M communication.

Three network communication options, GSM, CDMA and UMTS are available within the common board layout. Each unit will be certified as an end product, giving the user a PTCRB/ Carrier certified solution.

#### **400AP Series Benefits**

- Quick-to-market solution
- Increased reliability from a proven hardware platform
- Uses Linux-based open source software for simplified development
- Cost-effective solution to custom manufacturing
- Easily adapts to future technology

#### CONTROL DEVICES

#### **Terminus Plug-In Terminals**

GSM865CF, CDMA864CF, UMTS864CF

These GSM/GPRS, CDMA, and UMTS devices provide a new

range of board-level, Plug-In compatible components for use in cellular communication. They are specifically designed for easy integration into all existing and new M2M application designs.



The Terminus GSM865CF,

Terminus CDMA864CF and Terminus UMTS864CF share the same mechanical footprint and offer communications via all three cellular communication protocols. These Terminus products enable users to easily change network and user configurability as technology and communication needs evolve. By adding the Terminus Plug-In boards into new or existing architectures and making the necessary software changes, users can configure their designs to any method of cellular communication. The DIP-style packaging allows the Terminus boards to be easily mounted directly into any new or existing designs.

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#### **Wi-Fi Terminus NT-110ST**

The Wi-Fi Terminus NT-110ST combines GPS technology with Wi-Fi transport. Incorporating sister company, NavSync's ultrasensitive CW20 GPS receiver, the Wi-Fi terminus provides an 802.11b transmission containing NMEA streams giving device locations (longitude and latitude) and UTC time. The 802.11b supports WPA2

#### **Wi-Fi Terminus NT-220LT**

Wi-Fi supports WPA2 encryption and is

fully configurable to virtually any Wi-Fi network.

encryption and is fully configurable

to a specific network.

The rugged Terminus NT-220LT combines state-of-the-art 16 channel GPS receiver technology with 802.11 Wi-Fi transport protocol. Incorporating sister company, NavSync's ultra-sensitive navigational GPS receiver, the Terminus NT-220LT provides Wi-Fi transportation of standard, user-configurable NMEA information (longitude, latitude, and UTC time). The 802.11 b/g compliant

#### **Looking Forward —**

#### 2nd Generation Standard Terminus (T2)

Building on our highly successful line of cost effective terminal products, the 2nd generation Standard Terminus will include the best attributes of the current devices as well as a host of new features — a microcontroller, an accelerometer, (3) contact closure inputs and (2) 4 to 20 mA current loop sensor inputs. The Standard Terminus T2 is perfect for any wireless applications requiring rapid deployment of an intelligent terminal. *Available Q4 2011* 

#### **Low Cost Terminus Tracker**

Designed specifically for cost-sensitive asset tracking applications, the Terminus Tracker incorporates Telits' new GE864-GPS GSM/GPRS/GPS module in a plastic housing with standard power, I/O, and antenna connections. The low cost with exceptional features and functions make the Terminus Tracker the device of choice for AVL and other asset tracking applications. *Available Q1 2012* 

#### **Wireline to Wireless Replacement Terminus**

Janus' Wireline Replacement Terminus is a POTS (plain old telephone service) line emulator using cellular transport. Incorporating Janus' versatile line of Plug-In Modems for connectivity on virtually any cellular network, the Wireline Replacement Terminus allows the user to create a wireless network connection from any fixed telephone line. *Available Q1 2012* 

#### **HSPA+ Plug-In Modem**

The Janus HSPA910CF Plug-In Modem is a full-featured, open frame HPSA+ (3G) terminal specifically designed to be quickly and easily incorporated directly onto any application PC Board. The DIP (Dual Inline Package) design allows maximum flexibility integration. Using the Telit's penta-band HE910 as the cellular heart of the modem, the Plug-In Terminus can be used in GSM, GPRS, EDGE, UMTS and HSPA networks. *Available Q1 2012* 

#### **EV-DO Plug-In Modem**

The Janus EVDO910CF Plug-In Modem is a full-featured, open frame EVDO (3G) terminal specifically designed to be quickly and easily incorporated directly onto any application PC Board. The DIP (Dual Inline Package) design allows maximum flexibility integration. Telit's DE910 provides the Janus Plug-In Terminus a 3G CDMA solution for M2M applications. *Available Q2 2012* 



#### Custom Design Solutions for your M2M Applications

## JANUS REMOTE COMMUNICATIONS

#### **Our Area of Expertise includes:**

- GSM/GPRS Communications
- CDMA Communications
- HSPA / LTE
- GPS Timing & Synchronization RFID
- GPS Navigation
- Wi-Fi 802.11
- Ethernet 802.3

- OBE
- Bluetooth
- WiMax
- \_\_\_\_
- IrDA
- Zigbee
- Sensor Monitoring

Janus is the answer to your M2M requirements. Whether off-the-shelf or custom solutions, we can create your M2M solution packaged from our initial design proposals through product distribution, or we can work with you on your design. The choice is yours. Just let us know how we can work for you.

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 M2M application goals.



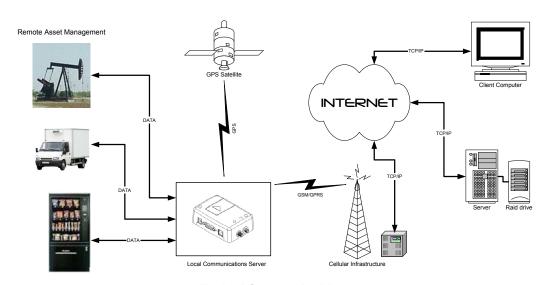
#### **Technology Partner**



#### WIRELESS MODULES

Telit Wireless Solutions is a leading global mobile communications technology company. Its Wireless Solutions division develops manufactures and markets GSM/GPRS and CDMA modules for machine-to-machine (M2M) applications which enable machines, devices or vehicles to communicate via mobile networks. Telit modules are marketed and deployed worldwide.

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



**Typical System Architecture** 



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