jett.

PRODUCT CATALOG

Two Technologies, Inc.

Hand Held Computers • Your Way • Since 1987

Contact us today to learn more about our customizable, rugged hand held products:

TEL 215.441.5305
FAX 215.441.0423

SALES
real.rugged@2T.com

CUSTOMER SERVICE
customersupport@2T.com

TECHNICAL SERVICES
techsupport@2T.com

REPAIR SERVICES
customercare@2T.com

www.2T.com

WHAT WE DO

You may not know our name or recognize our logo, but you've seen our products — every day, throughout the world. Two Technologies has been designing and manufacturing customizable, rugged hand held computer and terminal products for industrial and commercial applications since1987.

Virtually all of the products manufactured by Two Technologies are customized specifically for our customers' unique applications. Throughout the years, we have succeeded in leading our market segment with the most cost-effective solutions available. Our highly automated manufacturing and test facility is a model for state-of-the-art assembly.
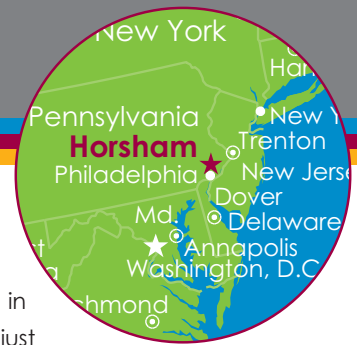
Two Technologies' customizable, rugged hand held computer and terminal products are in constant use throughout the world. These products can be found in a multitude of different applications, developed by our OEM customers and Value-Added Resellers; thousands of companies in diverse industries, ranging from agriculture to security (and everything in between), and we'd love nothing better than to put our 20+ years of expertise to work for you.

FIND US ON THE MAP

Two Technologies, Inc.® is located in beautiful Horsham, Pennsylvania, just 23 miles NE of Philadelphia, the City of Brotherly Love. Incorporated in 1717, Horsham Township has a rich history dating back to the settlement of migrating Quakers to the testing of the Autogyro in 1928 (later to become the helicopter). And how could any local forget the awe-inspiring air shows that took place at the Willow Grove Naval Air Station?

Nestled in the center of Horsham, our headquarters is surrounded by tall trees, golf courses, walking trails, and historic residences. Though it's far from the fast-paced streets of the city, many corporate headquarters operate within the vicinity: Advanta®, GMAC®, NutriSystems®, Toll Brothers®, Inc., LA Weight Loss Centers® and Asplundh™, just to name a few.

Our fully-automated manufacturing facility is teeming with talent and dedication, making it possible to design and manufacture high quality products in large volumes. Our employees take pride in our products and it shows; there is always a welcome waiting for you on our manufacturing floor, a concerned customer care representative waiting to take your call, a group of programmers working late to tackle a challenge. Two Technologies is one big family, sharing the success that we've worked hard to achieve, together.

"We love what we do!" 2T Family Portrait-2007

ABOUT US

OUR HISTORY

Two Technologies, Inc. manufacturing facility in Horsham, PA produces an average of 40,000 products each year.

When Two Technologies was formed in 1987, our primary objective was to design a high quality hand held that was intuitive to operate, as well as being rugged and cost effective. We knew that no one could understand the requirements of your application better than you. It was our mission to have an operator pick up a hand held and intuitively know how to operate your equipment or execute your application without a user's manual; all through the use of application specific graphics on the keypad and bezel. Our journey began with the introduction of our first product, the 8045.

After the 8045, came the TechTerm® and a flurry of customers fleeing from our competitors. Early on, we realized that the key to our success in some very competitive markets, was our "YES!" attitude. We gained our reputation as a "YES" company by finding ways to meet customers' requirements – even if we had to venture off the beaten path. We are proud to say that after all these years, this attitude is an integral part of our company philosophy.

Today, many of our original employees and customers are still with us. We've worked with over 5000 customers and have over one million products in the field. In addition to offices in Asia and Europe, we maintain an international network of Value-Added partners throughout the world. Our products have been the choice of market leaders in Fortune 500 companies and entrepreneurs alike.

"The cost savings of an off-the-shelf product is long forgotten six months down the road when that off-the-shelf-product is discontinued." Eric Eckstein, President and COO

| 80 Series | TechTerm® | ProTerm | PDS | PCL Series | SMT | PSMT | HV Series | CEL |
| 1987 | 1988 | 1992 | 1992 | 1994 | 1994 | 1996 | 1997 | 2000 |

⚛ A GREEN COMPANY CULTURE

We're continually striving to be a better corporate citizen, adopting environmentally-friendly practices and technologies. All of Two Technologies standard products are RoHS compliant, demonstrating our commitment to keeping harmful substances out of our shared ecosystem.

All standard products from Two Technologies are also FCC and CE certified, ensuring product safety.

At Two Technologies, we think it's important to embrace eco-friendly measures with the goal of achieving the highest levels of environmental quality in our products, services, and corporate activities. We do our utmost to protect and preserve the environment and promote sustainable economic growth now and for future generations.

Learn more about our RoHS Compliance at:
www.2T.com/rohs.htm

⚛ APPLICATIONS AND MARKETS

Two Technologies' customizable, rugged hand held computers and terminals are in constant use throughout the world and can be found in a multitude of applications developed by our OEM and Value-Added customers.

Our sales and technical service teams are staffed by highly-trained professionals who have the experience to understand your design and application, regardless of your industry. Over the years, Two Technologies has worked with businesses in the following markets and more:

• **Surveying**	• **Transportation**
• **Hospitality**	• **Traffic Control**
• **Construction**	• **Security**
• **Agriculture**	• **Aerospace**
• **Environmental**	• **Military**
• **Printing**	• **Forestry**
• **Packaging**	• **After Market Automotive**
• **Medical**	
• **GIS**	• **Robotics**
• **Parking Enforcement**	• **Motion Control**
	• **Forensics**
• **HVAC**	• **Tracking**
• **Shipping**	• **Access Control**

TouchLite	ProMotion	PCL-486	JETT®•ce	JETT®•RFID	JETT®•RFID+	JETT•XL®	JETT•eye™
2000	2001	2001	2001	2003	2005	2006	2007

⚬⚬⚬ GEM PARTNER PROGRAM ✺ ✺ ✺ ✺ ✺

Two Technologies' GEM Partner Program provides strategic assistance in creating successful mobile computing solutions for global markets. Designed to help increase profits while minimizing risk, the program offers discounted pricing, product training, marketing incentives and support, as well as exclusive access to conferences, events and our GEM Partner Extranet.

GEM Partners include international and domestic OEM customers and Value-Added Resellers whose capabilities complement our product offerings and services. Over 400 partners team with us to provide software expertise, services, and distribution support in bringing our mobile computer products to the world. Our multi-tiered program allows partners to participate at the level most appropriate for their business objectives.

⚬⚬⚬ GEMPASS PERIPHERAL/SOFTWARE SERVICES

GEMPASS offers a complete menu of resources and technical engineering support in the delivery of customized hand held computer solutions for a variety of industries. By leveraging our technical expertise, quality products and industry knowledge, you can extend your product offering while reducing time-to-market and production costs for greater productivity and market reach.

- • **Lower Development and Production Costs**
- • **No Need for New Personnel**
- • **Elimination of Learning Curve**
- • **One-Stop Resource**
- • **Custom, Value-Added Solutions**
- • **Greater Market Reach**
- • **Alliance with Industry Leader**

⚬⚬⚬ SERVICE AND SUPPORT

Two Technologies offers industry leading service and support on all our products. From your first interaction with our sales team, throughout the lifecycle of the products you purchase, we are here to work with you every step of the way.
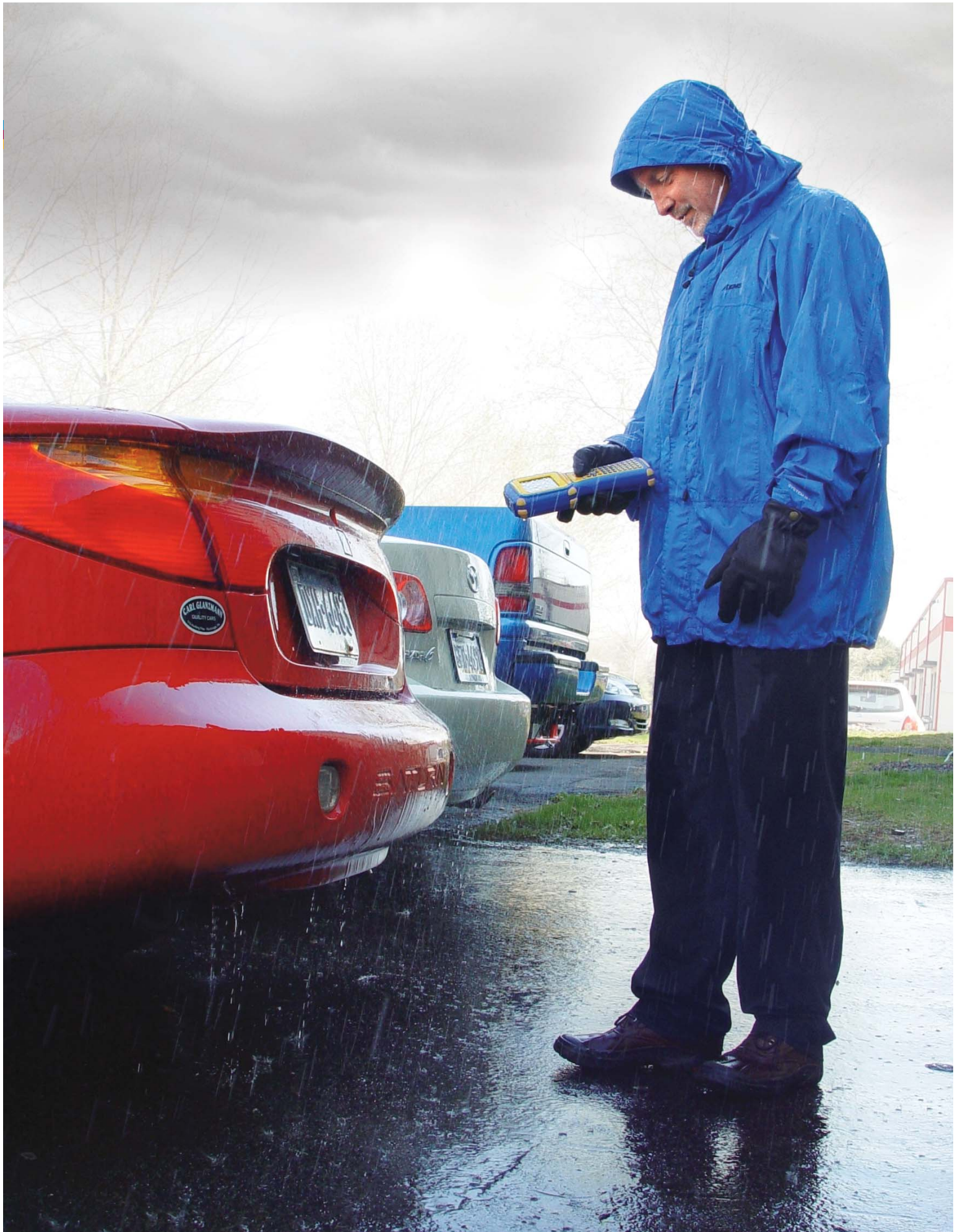
Our technical service and customer support teams are staffed with experienced professionals dedicated to your successful adoption and use of our technology.

As rugged as our JETT products are, accidents do happen. Our **eRMA** system makes it quick and easy for you to submit and track repairs online.

Megan O'Connor
Engineering Process
Coordinator

David Zan
Documentation
Control Manager

Become a GEM Partner today at:
www.2T.com/GEM

CUSTOMIZATION

CUSTOMIZABLE FROM THE OUTSIDE IN

At Two Technologies, custom is our standard. We can make our product a seamless part of your product, whether you want a hand held to assume a starring role or perform as unobtrusively as possibe. Your colors. Your logo. Your keypad. It's your choice...and choice is a nice option.

Intuitive Operation

Design a custom keypad with intuitive, application-specific graphics and you can shorten training time, improve user efficiency, and reduce costly errors. Your customers will agree that it makes more sense to have a print key labeled "PRINT", rather than a print key labeled "F1". Customize one key, or the entire keypad. There is truly no limit to what you can do with your keypad configuration and graphics.

Branding

Don't settle for an off-the-shelf black or gray unit when you can easily extend your brand with a unique hand held that is consistent with your corporate identity. We can match your JETT® to your exisiting products or help you create a new harmonious color combination that will stand out from the pack. The JETT offers several logo placements so you can display your logo and product name where they belong—in front of your customers.

WHY CUSTOMIZE?

☑ **Shortened training time**

☑ **Fewer tech calls**

☑ **Reduced documentation**

☑ **Fewer errors**

☑ **Unprecedented customer loyalty**

☑ **Not offered by competitors**

☑ **Field identification**

☑ **True differentiation in market**

Competitive Advantage

Virtually lock-out your competitors. Two Technologies will never sell your "branded" hand held computer to another, so you will never see it offered by a competitor. Your hand held becomes a seamless part of your proprietary solution.

Serial Tags

Labels

Cables & Connectors

Bumper Color

Case Color

FDE
Delivery Experts

Start   V... T...   10:04 AM

FDE Delivery Experts

Display Bezel

Logo Tag (or Stylus Holder)

LED Logo Tag

Keypad Bezel

Keypad Graphics

Keypad Configuration

Want to see how a JETT will look with your colors? Browse through thousands of possible color combinations with the JETT•design:
www.2T.com/customizations

WOW! An example of a standard 45-key elastomeric keypad and bezel that has been completely customized based on very specific customer needs.

DISPLAY

All JETT products come with a 320x240 pixel QVGA-TFT color display that is sunlight readable with an LED backlight for easy viewing in high or low light conditions. The touch screen gives you the ability to create GUI based applications—providing unlimited possibilities for user control.

RUGGED HARDWARE

All JETT products are manufactured to be rugged for use in extreme environments. Specifically designed for industrial and commercial use, the cases are molded from Xenoy®, one of the most durable, chemical-resistant materials available in the market.

Need extra protection? An IP65 rating comes standard on all JETT products. IP65 means your JETT is **dust-tight and protected from water jets.** Take it out into the field without worrying about the elements, or the accidental drop in a puddle.

WARRANTY

All of our JETT computers are backed with a 1 year warranty. Extended warranties are available through our JETT•RX Program—an innovative service plan providing multiple levels of extended warranty services to meet your needs.

JETT Hand Strap
(Not available on RFID units)

JETT•hook
(Hook shown
not available on
JETT•PACK
or RFID units)

KEYPADS

Differentiate your product with an intuitive, application specific keypad. Choose from many standard keypad configurations and several keypad types, depending on your application and environmental requirements.

Membrane
Best used when working in harsh conditions where chemicals, dirt and liquids may be present. Securely clamped into place, the keypad surface ensures excellent splash resistance and prevents curling or peeling of the keypad overlay.

Elastomeric
Great looking and excellent tactile feel. Epoxy caps make this keypad extremely resistant to wear and suitable for all environments, except where petroleum-based chemicals (oil) are present. Non-glare matte finish is also available.

Backlit and Backlit Phosphorescent
Increase visibility in low light conditions.

Most standard keypads are available in 15, 30, 45, and 52 key configurations.* Custom configurations are also available. Contact a sales representative for more information.

*Some keypads types are not available in all configurations.

OPTIONS

All of our JETT products are available with a wide range of internal and external options, allowing you to budget for what you really need and nothing you don't. Visit our website for a complete list of available options.

- **Internal Memory**
- **Case Options**
- **Processor Options**
- **Indicator Lights**
- **Integrated Wireless**
- **Interface Options**
- **Power Options**
- **and much more...**

⟡ ACCESSORIES

Choose from a wide variety of accessories available for all JETT products. Visit our website to view all available accessories. Accessories include:

- • Carrying Cases
- • Battery Chargers
- • Screen Protectors

- • Car & Desktop Chargers
- • In-vehicle mounts
- • and much more...

JETT®•FUEL Spare Battery Charger
(Available in single and 4 position)

JETT®•hangar Desktop Charger
(Available in single and 4 position)

Softsided Carrying Case

JETT® In-Vehicle Charging Cradle

⟡ PRINTERS

Two Technologies offers a full line of Printek® Mobile Thermal Printers. Rugged and easy-to-use, these printers are ideal for route accounting, warehousing, retail, parking enforcement and field service applications.

- • 2", 3" and 4" printers
- • Bluetooth and Wi-Fi available
- • Can be mounted or carried

- • Compact and lightweight
- • Rugged case design
- • Available in custom colors

FieldPro
Compact, lightweight, and affordable 4" Mobile Thermal Printer

MtP 400 Series
Rugged, Durable, Easy to Use, 4" Mobile Thermal Printer

Mt3-II Series
Small, Ultralight and Durable, IrDA®, Bluetooth® or Wi-Fi® Capable

Contact a sales representative to learn more about other available printers and printer accessories. Download the spec sheets at:

www.2T.com/printers

CUSTOMIZABLE AND RUGGED FOR A WIDE RANGE OF COMMERCIAL AND INDUSTRIAL APPLICATIONS

FEATURES

Powerful, Yet
Cost Effective

Ideal for Complex
and Varied
Applications

Sunlight Readable,
Backlit Color
Display for Outdoor
and Indoor Use

Completely
Customizable from
the Outside In

Want to see how a JETT•ce
will look with your colors?
Browse through thousands
of possible color combinations
with the JETT•design:

www.2T.com/customizations

Designed for one-handed operation, the JETT®•ce is an ideal solution to meet the complex and varied requirements of a wide range of applications.

The standard 320x240 pixel QVGA-TFT color display is sunlight readable with an LED backlight for easy viewing in high or low light conditions. The touch screen gives you the ability to create GUI based applications—providing unlimited possibilities for user control.

The JETT•ce comes standard with 512MB of built-in Compact FLASH which is expandable to 4GB and 64MB of SDRAM. For removable data storage or I/O cards, the JETT•ce is equipped with a Compact Flash (CF) slot.

Featuring a variety of interface options, the JETT•ce comes standard with one RS-232 serial port. For applications that require dual serial port capability, a second serial port configured as RS-232, RS-422 or RS-485 is available.

The JETT•ce comes standard as a battery powered unit with a rechargeable Nickel Metal Hydride (NiMH) battery pack, which is interchangeable with AA alkaline batteries. A line powered configuration is also available.

OPERATING SYSTEM	• Microsoft® Windows® CE .NET 4.2
PROCESSOR	• Intel® PXA255 XScale® Technology Processor - 200MHz (400MHz optional)
MEMORY & MASS STORAGE	• 512MB Compact FLASH built-in (expandable to 4GB) • 64MB SDRAM (30MB+ used for OS) • Type 2 Compact FLASH Card user accessible
INTERFACE	• One RS-232 Serial Port standard • Optional second serial port with a choice of RS-232, RS-422 or RS-485 (IP65 rating not available with second serial port) • Optional internal Wireless LAN 802.11b/g • Optional internal Bluetooth®
POWER	• Nickel Metal Hydride Rechargeable batteries 1650 mAh, 7.2V • AA Alkaline batteries (6) • Recharge/Line Power: 11 to 18 VDC, 1.5A • 8 hours typical operating time (actual time may vary based on a variety of conditions)
ENVIRONMENT	• Storage temperature: -20° to +70°C* (no batteries installed) • Operating temperature: -20° to + 50°C • Charging temperature: 0° to + 40°C** • Humidity: 5-95% (non-condensing) * Temp greater than +55°C dramatically reduces shelf life of battery. ** Fast charge will not start below 0°C.
KEYPAD	• 45-key keypad Standard (15 and 30 key available) • Custom keypad and graphics available
CERTIFICATIONS	• IP65 Ingress Protection (Independent Lab Tested) • FCC Class A • EN55022, 1998. (CISPR 22) Class A, EN55022/IEC 6100-4-6 RF CONTINUOUS CONDUCTED • EN55024, 1998 - ETSI EN 301489-1,2002 - ETSI EN 301489-3,2002 - EN/IEC 61000-4-2 ESD - EN/IEC 61000-4-3 RF ELECTROMAGNETIC FIELD - EN/IEC 61000-4-4 FAST TRANSIENTS • EN60950:2000 • RoHS Compliant
DEVELOPMENT TOOLS	• Development Environments: • Visual Studio® 2005 (Visual C#®, VisualC++®, Visual Basic®, Supports .NET CF 2.0) • Visual Studio® .NET 2003 (Visual Basic®.NET, C#®.NET) • embedded C++® 4.0
ENHANCED SOFTWARE OPTIONS	• Mobile Remote Device Management • Terminal Emulation
WARRANTY	• 1 Year Warranty (extended warranties available)

DIMENSIONS

• **Height:**
  9.84 in. (250.0 mm)
• **Width (Display area):**
  4.75 in. (120.7 mm)
• **Width (Keypad area):**
  3.07 in. (78.0 mm)
• **Depth:**
  1.83 in. (46.5 mm)
• **Display Size (Active area):**
  2.82 x 2.11 in.
  (71.62 mm x 53.60 mm)

WEIGHT

• **With Rechargeable Battery:**
  29.7 oz (822 g)
• **Without Battery:**
  23 oz (652 g)

FEATURES

Future-Proof, Field Upgradeable Software Defined Radio Architecture

13.56MHz Reader/Writer Supports Most Tags from Major Manufacturers

Ideal for Access Cards, Smart Cards, Payment Cards and Passports

Adjustable Antenna for Reading Tags at Virtually Any Angle

The JETT®•RFID+ mobile computer can read tag IDs, read and write data blocks, as well as authenticate and encrypt data to and from compatible tags. These capabilities allow solutions to support secure storage of information on tags for the privacy and security required in a number of markets, including healthcare, access control and mobile commerce.

An innovative first for the JETT•RFID+ is its future-proof, field upgradeable Software Defined Radio (SDR) architecture. SDR allows for new protocols and tags to be supported by existing hardware as they become available through simple field upgrades. With SDR your investment in the hardware platform is maximized and your risk of obsolescence is greatly minimized as RFID technologies advance.

Two Technologies' unique adjustable antenna allows for reading 13.56MHz tags in virtually any orientation. This innovation alleviates issues with HF RFID tag orientation often found in the library, item level supply chain, and electronic access control (EAC) markets.

The JETT•RFID+ is ideally suited for a variety of markets, such as warehousing, fleet management, transportation, mobile payment, field service, meter reading, time and attendance, emergency services, machine control, and inventory control.

The JETT•RFID+ reads/writes the following protocols*:

- **ISO 15693**
- **ISO 14443A**
- **ISO 14443B**

- **I-CODE®** (Philips Electronics N.V)
- **LR1512** (ST Microelectronics)
- **my-d®** (Infineon)
- **Tag-it™** (Texas Instruments)

*Other brands and protocols may be compatible. Please contact us for more information.

OPERATING SYSTEM	• Microsoft® Windows® CE .NET 4.2
PROCESSOR	• Intel® PXA255 XScale® Technology Processor - 200MHz (400MHz optional)
MEMORY & MASS STORAGE	• 512MB Compact FLASH built-in (expandable to 4GB) • 64MB SDRAM (30MB+ used for OS)
INTERFACE	• One RS-232 Serial Port
POWER	• Nickel Metal Hydride Rechargeable batteries 1650 mAh, 7.2V • AA Alkaline batteries (6) • Recharge/Line Power: 11 to 18 VDC, 1.5A • 8 hours typical operating time (actual time may vary based on a variety of conditions)
ENVIRONMENT	• Storage temperature: -20° to +70°C* (no batteries installed) • Operating temperature: -20° to + 50°C • Charging temperature: 0° to + 40°C** • Humidity: 5-95% (non-condensing) * Temp greater than +55°C dramatically reduces shelf life of battery. ** Fast charge will not start below 0°C.
KEYPAD	• 45-key keypad Standard (15 and 30 key available) • Custom keypad and graphics available
CERTIFICATIONS	• IP65 Ingress Protection (Independent Lab Tested) • FCC Part 15.225 (15C), Reg. # RYJJETTRFIDPLUS • Industry Canada RSS-210 6.2.2(e), 2001 • CE ETSI EN 300 330-2, 2001; EN55022, 1998. (CISPR22) Class A; EN55024, 1998; ETSI EN 301489-1, 2002; ETSI EN 301489-3, 2002 • RoHS Compliant
DEVELOPMENT TOOLS	• Development Environments: • Visual Studio® 2005 (Visual C#®, VisualC++®, Visual Basic®, Supports .NET CF 2.0) • Visual Studio® .NET 2003 (Visual Basic®.NET, C#®.NET) • embedded C++® 4.0
ENHANCED SOFTWARE OPTIONS	• Mobile Remote Device Management • Terminal Emulation
WARRANTY	• 1 Year Warranty (extended warranties available)

DIMENSIONS

- **Height:**
  9.84 in. (250.0 mm)
- **Width (Display area):**
  4.75 in. (120.7 mm)
- **Width (Keypad area):**
  3.07 in. (78.0 mm)
- **Depth (closed position):**
  2.37 inches (60.2 mm)
- **Display Size (Active area):**
  2.82 x 2.11 in.
  (71.62 mm x 53.60 mm)
- **RFID Module:**
  3.89 x 3.92 in.
  (90.81 mm x 99.57 mm)

WEIGHT

- **With Rechargeable Battery:**
  33 oz (935.5 g)
- **Without Battery:**
  27 oz (765.4 g)

jett.XL® ⠿ FAST, POWERFUL, RUGGEDIZED

⠿ FEATURES

Wireless
Connectivity for
Streamlined
Dataflow

Rugged for
Commercial
and Industrial
Environments

IP65 Rated –
Protects Against
Dust and Rain

Future-Proof with
PACK Ready
Technology

RFID   GPS   GPRS GSM   YOUR WAY

pack READY

The JETT•XL® is simply the fastest, most powerful, rugged mobile hand held computer available today.

The JETT•XL features a commanding, 624 MHz, Intel PXA270 processor that utilizes an integrated system-on-a-chip microprocessor to deliver the highest levels of performance. Designed specifically for the low power needs of battery powered devices, the PXA270 features XScale ARM7® micro architecture with on-the-fly voltage and frequency scaling, and sophisticated power management. In other words, it's fast and powerful, yet cost-effective.

JETT•XL comes standard with both 802.11b/g and Bluetooth® technology that allows for concurrent operation with maximum efficiency. If wide area networking is needed, GPRS GSM is optionally available. Of course there is also standard USB and your choice of RS-232, RS-485 and RS-422 serial interfaces. Talk to a printer, another device, or a central company database— JETT•XL makes it easy.

Rain, dust, the accidental fall...the JETT•XL can take it. It's built tough because we know your application demands it. With its solid casing and IP65 rating, you can be sure that it can handle even the harshest environments.

OPERATING SYSTEM	• Microsoft® Windows® CE .NET 5.0
PROCESSOR	• Intel® PXA270 XScale® Technology Processor - 624MHz
MEMORY & MASS STORAGE	• 512MB FLASH built-in (expandable to 8GB or higher optional) • 128MB SDRAM Standard (30MB+ used for OS) • Type 2 Compact FLASH Card user accessible
INTERFACE	• One RS-232 Serial Port standard • USB (Host and Client) • Optional second serial port with a choice of RS-232, RS-422 or RS-485 • Internal Wireless LAN 802.11b/g (standard option) • Internal Bluetooth® (standard option)
POWER	• Nickel Metal Hydride Extended Capacity Rechargeable batteries 2500 mAh, 7.2V • Recharge/Line Power: 11 to 18 VDC, 1.5A • 9 hours typical operating time (actual time may vary based on a variety of conditions)
ENVIRONMENT	• Storage temperature: -20° to +70°C* (no batteries installed) • Operating temperature: -20° to + 50°C • Charging temperature: -0° to + 40°C** • Humidity: 5-95% (non-condensing) * Temp greater than +55°C dramatically reduces shelf life of battery. ** Fast charge will not start below 0°C.
KEYPAD	• 45-key keypad standard (15 and 30 key available) • Custom keypad and graphics available
STYLUS HOLDER	• Standard Stylus Holder
CERTIFICATIONS	• IP65 Ingress Protection (Independent Lab Tested) • FCC Class A • EN55022, 1998. (CISPR 22) Class A, EN55022/IEC 6100-4-6 RF CONTINUOUS CONDUCTED • EN55024, 1998 - ETSI EN 301489-1,2002 - ETSI EN 301489-3,2002 - EN/IEC 61000-4-2 ESD - EN/IEC 61000-4-3 RF ELECTROMAGNETIC FIELD - EN/IEC 61000-4-4 FAST TRANSIENTS • RoHS Compliant
DEVELOPMENT TOOLS	• Development Environments: • Visual Studio® 2005 (Visual C#®, VisualC++®, Visual Basic®, Supports .NET CF 2.0) • Visual Studio® .NET 2003 (Visual Basic®.NET, C#®.NET) • embedded C++® 4.0 • 2T Developer's Library: 2T JETT Development Kits, 2T JETT SDK utilities for device specific features and functions
ENHANCED SOFTWARE OPTIONS	• Mobile Remote Device Management • Terminal Emulation
WARRANTY	• 1 Year Warranty (extended warranties available)

→ **DIMENSIONS**

- **Height:** 9.84 in. (250.0 mm)
- **Width (Display area):** 4.75 in. (120.7 mm)
- **Width (Keypad area):** 3.07 in. (78.0 mm)
- **Depth:** 1.83 in. (46.5 mm)
- **Display Size (Active area):** 2.82 x 2.11 in. (71.62 mm x 53.60 mm)

→ **WEIGHT**

- **With Rechargeable Battery:** 32.3 oz (915 grams)
- **Without Battery:** 23 oz (652 grams)

jett.eye™

A PICTURE IS WORTH A THOUSAND KEYSTROKES™

FEATURES

Integrated Color Camera and Bar Code Imager

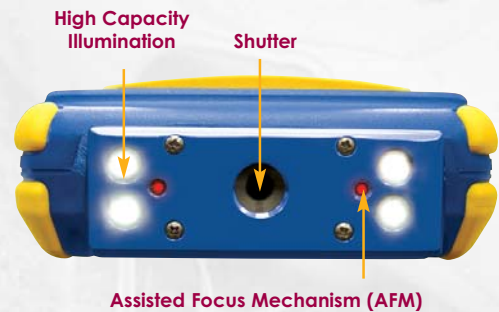Integrated Wireless Connectivity for Streamlined Dataflow

IP65 Rated – Protects Against Dust and Rain

Future-Proof with PACK Ready Technology

Take digital color pictures in the field. Capture data on the go. Seamlessly connect with the office. Simultaneously increase field service productivity, improve customer service, and turbo charge your profits—all while improving your customer relationships. This complex scenario is now made simple with the JETT•eye.

With integrated Bluetooth® and WLAN 802.11b/g, and a 5.17 MP color camera system that accomplishes both digital image capture and bar code capture, the JETT•eye streamlines operations and simplifies workflow. Plus, with the IP65 rating, your application is now equipped to survive even the toughest environments.

High Capacity Illumination   **Shutter**

Assisted Focus Mechanism (AFM)

pack READY

RFID   **GPS**   **GPRS GSM**   **YOUR WAY**

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OPERATING SYSTEM	• Microsoft® Windows® CE .NET 5.0
PROCESSOR	• Intel® PXA270 XScale® Technology Processor - 624MHz
MEMORY & MASS STORAGE	• 512MB FLASH built-in (expandable to 8GB or higher optional) • 128MB SDRAM Standard (30MB+ used for OS)
INTERFACE	• One RS-232 Serial Port standard • USB (Host and Client) • Optional second serial port with a choice of RS-232, RS-422 or RS-485 (restrictions apply) • Internal Wireless LAN 802.11b/g (standard option) • Internal Bluetooth® (standard option)
POWER	• Nickel Metal Hydride Extended Capacity Rechargeable batteries 2500 mAh, 7.2V • Recharge/Line Power: 11 to 18 VDC, 1.5A • 9 hours typical operating time (actual time may vary based on a variety of conditions)
ENVIRONMENT	• Storage temperature: -20^0 to $+70^oC^*$ (no batteries installed) • Operating temperature: -20^0 to $+ 50^oC$ • Charging temperature: 0° to $+ 40^oC^{**}$ • Humidity: 5-95% (non-condensing) * Temp greater than $+55^oC$ dramatically reduces shelf life of battery. ** Fast charge will not start below 0^oC.
KEYPAD	• 52-key joystick style keypad standard with bezel nomenclature (45, 30, and 15 key available) • Custom keypad and graphics available
STYLUS HOLDER	• Standard Stylus Holder
CERTIFICATIONS	• IP65 Ingress Protection (Independent Lab Tested) • FCC Class A • EN55022, 1998. (CISPR 22) Class A, EN55022/IEC 6100-4-6 RF CONTINUOUS CONDUCTED • EN55024, 1998 - ETSI EN 301489-1,2002 - ETSI EN 301 489-3,2002 - EN/IEC 61000-4-2 ESD - EN/IEC 61000-4-3 RF ELECTRO MAGNETIC FIELD - EN/IEC 61000-4-4 FAST TRANSIENTS • EN60950:2000 • RoHS Compliant
DEVELOPMENT TOOLS	• Development Environments: • Visual Studio® 2005 (Visual C#®, VisualC++®, Visual Basic®, Supports .NET CF 2.0) • Visual Studio® .NET 2003 (Visual Basic®.NET, C#®.NET) • embedded C++® 4.0 • 2T Developer's Library: 2T JETT Development Kits, 2T JETT SDK utilities for device specific features and functions • eye•WARE™ Software Suite
ENHANCED SOFTWARE OPTIONS	• Mobile Remote Device Management • Terminal Emulation
WARRANTY	• 1 Year Warranty (extended warranties available)
BAR CODE SYMBOLOGY	• Code 128 • Code 39 • Code 2 of 5 • EAN-13 • PDF417 • UPC
TRUE-CAMERA-SYSTEM	• 5.17 megapixel color CMOS Sensor - 4 megapixel processed • Auto Focus and Illumination

DIMENSIONS
• **Height:** 9.84 in. (250.0 mm)
• **Width (Display area):** 4.75 in. (120.7 mm)
• **Width (Keypad area):** 3.07 in. (78.0 mm)
• **Depth:** 1.83 in. (46.5 mm)
• **Display Size (Active area):** 2.82 x 2.11 in. (71.62 mm x 53.60 mm)

WEIGHT
• **With Rechargeable Battery:** 32.32 oz (916.25 g)
• **Without Battery:** 25.6 oz (725.75 g)

Learn more at: www.2T.com

Get to know the JETT•eye today!
Download the JETT•eye brochure and
User's Companion Guide at: **www.2T.com**

**Call us to receive your FREE
JETT•eye Tips & Tricks DVD!**

MODULAR CUSTOMIZATION

A MODULAR APPROACH

We take customization to a new level with a wide variety of modular customization options. Our JETT® products are designed to be flexible, allowing you to get exactly what you need, and nothing you don't. From scanners to wireless communication, Two Technologies allows you to easily add functionality and stay up to date with technology.

JETT®•HATCH   Compact Flash Card Protection System

The JETT•HATCH extends the JETT•XL's ability to be customized while maintaining integrity as a rugged device. It is the perfect solution for those who use CF-based peripherals and need to maintain a high IP rating as an integral part of their application. It can also be modified to fit other specific requirements, such as antennas and cabling. The JETT•HATCH has an antenna compatible, SMA connector, and can come with an optional audio pass through connector.

LOW PROFILE
- IP65 Sealed
- Maximum Card Height: 1.687 in.
- Max. Top of Card Width: 1.936 in.
- Extends Unit Length by .593 in.

More compact profile for a sleeker look and feel while still able to accommodate an array of design options.

HIGH PROFILE
- IP65 Sealed
- Maximum Card Height: 2.75 in.
- Max. Top of Card Width: 1.936 in.
- Extends Unit Length by 1.70 in.

Extended profile to accommodate larger cards and more design options.

For added environmental protection, the JETT•ce, JETT•RFID+ and JETT•XL will be equipped with a Low Profile Hatch, effective January 1, 2008.

13.56MHz RFID

Need power and an RFID scanner? The JETT•XL® and JETT•eye™ can also be equipped with a 13.56MHz (high frequency)RFID read/write module that supports most ISO 14443A, ISO 14443B, and ISO 15693 tags from most major manufacturers.

For a list of compatible protocols, see the JETT•RFID+ (page 12)

jett.pack®

Available for all PACK Ready
JETT•XL® and JETT•eye™ units.

As hardware requirements evolve with increasing speed, we want you to be able to respond quickly, economically, and with minimal downtime. The JETT•PACK® is a cartridge system that allows peripheral devices to easily mate with a JETT•XL® or JETT•eye™ hand held computer. It is similar in principle to a large compact flash card.

The PACK system is comprised of a mounting bracket assembly (PACK CONNECT) along with an enclosure assembly (PACK). The mounting bracket assembly is attached to the back of a "PACK Ready" JETT. Various PACKs may be interchangeably inserted into the PACK CONNECT.

Another significant reason to utilize a PACK approach is related to compliance testing. Individual PACK devices may be tested separately. This significantly eases the cost and time required for compliance work.

Market demand can be summarized with a single phrase "If only it had..." The PACK provides an economical means to satisfy much of this demand and "future-proof" your hardware investment.

SPECIFICATIONS

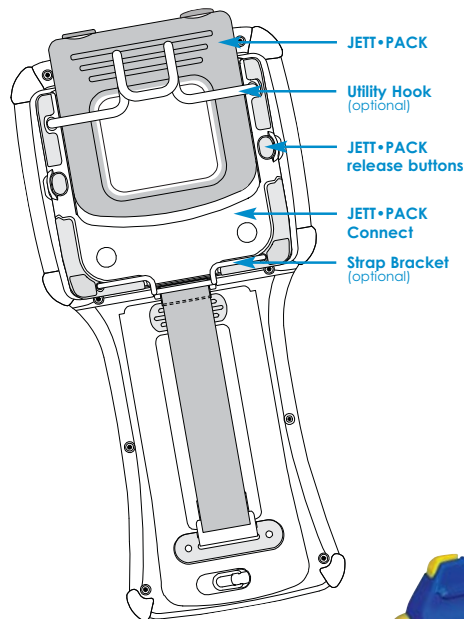|	
INTERFACES AVAILABLE FOR PACK	• Ground and 5VDC (approximately 800 mA for JETT•XL and JETT•eye) • Internal battery voltage bus (contact us for more info.)
SERIAL PORTS AVAILABLE	• Serial Ports (2): TX, RX, RTS, CTS • USB Host
OPTIONS	• Utility Hook • Strap Bracket
AVAILABLE PERIPHERALS	• JETT®•WAVE (a UHF spread spectrum radio modem) • GPS/GPRS GSM • Laser Scanner • RFID Reader/Writer • Various levels of GPS* • Memory Backup (USB Flash Drive)* • Cellular Radios, GPRS* * future offering
PACK YOUR WAY	Using the empty housing contained in a JETT•PACK Kit, an integrator can develop customized peripheral devices appropriate to their needs. Such components may include: • Custom RFID Readers • Custom radios for meter reading • Optical sensors for fiber optics • Infrared sensors for temperature measurement

JETT•PACK
Utility Hook (optional)
JETT•PACK release buttons
JETT•PACK Connect
Strap Bracket (optional)

DIMENSIONS

PACK
• **Height:** 4.31 in. (109.47 mm)
• **Width:** 3.26 in. (82.80 mm)
• **Depth:** .73 in. (18.54 mm)

JETT WITH PACK
• **Height:** 10.2 in. (259.08 mm)
• **Depth:** 2.50 in. (63.5 mm)

WEIGHT

• **Emtpy PACK** 2.87 oz (81.6 g)

pack READY
RFID   GPS
GPRS GSM   YOUR WAY

What is "PACK Ready"? The JETT•XL & JETT•eye are "PACK Ready" which means that they are delivered from our factory with all of the components necessary to allow the JETT•PACK® system to be added at a later date, without the need to return the device to Two Technologies. PACK Ready means truly field upgradeable.

Available for all PACK Ready JETT•XL® and JETT•eye™ units.

The JETT®•WAVE RF Data Transfer System is an excellent solution for medium range wireless coverage. The radios offer "rock solid" performance at distances that can extend to multiple miles. The JETT•WAVE system employs spread spectrum frequency hopping radios that operate at 900 MHz. The system employs a unique data checking algorithm to ensure the integrity of data across the RF link. The JETT•WAVE Base radio interfaces to existing equipment via a standard RS232 connection, allowing any piece of equipment to become "wireless."

The unit can be configured to operate in different "groups" allowing multiple devices to be operating independently in close proximity to one another. Serial interface to other equipment is configurable to a variety of standard baud rates.

The JETT•WAVE radio system, just one more way that Two Technologies answers the call for versatility and flexibility in hand held computer products.

SPECIFICATIONS

PACK and BASE RADIO

RADIO	
	• Operates in a frequency range of 902-928 MHz • FHSS (Frequency Hopping Spread Spectrum) -10 hop sequences share 50 frequencies • FSK (Frequency Shift Key) Modulation • Supported Network Topologies - Peer-To-Peer, Point-to-Point, Point-to-Multipoint & Multidrop • 256-bit AES Encryption (AES algorithm Is FIPS -197certified) • Transmit Power Output (software selectable) - 10mW, 100mW, 250mW, 500mW, 1W • Indoor/Urban Range[1] (w/ 2.1 dB dipole antenna) - Up to 3000' (900 m)	• Outdoor[2] (w/ 2.1 dB dipole antenna) - Up to 14 miles (22 km) • Interface Data Rate (software selectable) - 1200 – 115,200 bps • Extensive Command language allows complete programmatic control of all radio functions.

Throughput Data Rate (software selectable)	9,600 bps	115,200 bps
RF Data Rate	10,000 bps	125,000 bps
Receiver Sensitivity	-110 dBm	-100 dBm

1. Actual range is dependent on many factors, including environment, terrain, building density, etc. 2. This is line-of-sight range and can vary based on a number of environmental factors.

ANTENNA	• 2.1db Dipole antenna with SMA type connector (50 ohms unbalanced)

BASE RADIO

POWER	• Power for the JETT•WAVE Base Radio is provided by two (2) 1650 mAh nickel metal hydride batteries. • Batteries will provide 12 hours of operating time (transmit power used will affect operating time)
CONTROLS AND INDICATORS	• LED indicators - Power, Charge, Battery, Temperature, TX, RX, Signal Strength • ON – OFF Switch • RS232 Interface with DE9 connector • Charging connector
ENVIRONMENTAL	• The JETT•WAVE Base Radio is fully sealed to meet IP65 specs • Powder coated aluminum extrusion housing designed to withstand severe conditions • Removable antenna

PACK RADIO

POWER	• Power for the JETT•WAVE PACK Radio is Provided through the JETT•XL® or JETT•eye™.
ENVIRONMENTAL	• The JETT•WAVE PACK radio is fully sealed to meet IP65 specs • Removable antenna

DIMENSIONS

BASE RADIO
• **Height:** 2.07 in. (52.58 mm)
• **Height w/antenna:** 7.10 in. (180.34 mm)
• **Width:** 5.92 in. (150.37 mm)
• **Length:** 5.74 in. (145.80 mm)
• **Weight:** 2.18 lbs (988.83 grams)

jett.pack® GPS/GPRS GSM

Available for all PACK Ready
JETT•XL® and JETT•eye™ units.

The GPS/GPRS GSM JETT•PACK® is an integrated positioning system solution that contains a quad band GPRS module and a GPS receiver. The GPRS module contains all the functionality (including Voice, SMS, Circuit Switched Data, GPRS and EGPRS (Class 10 Data) required to integrate with global GSM/GPRS/EDGE networks.

The GPS receiver features a powerful 16-channel ANTARIS 4 positioning engine that gives you a superior level of performance for embedded GPS applications.

GPRS

RADIO PERFORMANCE	• Radio frequency: 850/900/1800/1900 • Sensitivity: -106 dB (Typical) • Transmit Power: Class 4 (2W @850/900 MHz), Class 1 (1W @1800/1900 MHz)
EGPRS/GPRS PACKET DATA	• Mode: Class B, Multislot 10 • Protocol: GPRS Rel 97 and 99, SMG 31 • Coding Schemes: CS1 CS4 • Packet Channel: PBCCH/PCCCH
GSM FUNCTIONALITY	• Voice: FR, EFR, HR & AMR • CS Data: Asynchronous, Transparent and Non-Transparent up to 14.4 KB • GSM SMS: Text, PDU, MO/MT Cell Broadcast
SIM ACCESS	• SIM Carrier: 3V SIM Integrated Carrier
APPLICATION INTERFACE	• Host Protocols: AT Commands, CMUX • Internal Protocols: PPP, CMUX • API Control/Status: AT
PERIPHERAL INTERFACE	• 1 Headset (2.5mm Universal Jack)
GSM ANTENNA	• Quad Band Active Antenna (Internal) (850, 900, 1800, 1900 MHz)

GPS

RECEIVER PERFORMANCE DATA	• Receiver Type: 16-channel, L1 frequency, C/A code
	• Max. Update Rate: 4 Hz
	• Accuracy Position: 2.5 m CEP, GPS/SBAS: 2.0 m CEP*
	• Start-up Times: Hot Start - 3.5 Secs.
	  Warm Start - 33 secs./ Cold Start - 34 Secs.
	  Aided Start - 5 secs./ Reacquisition - 1 Secs.
	• Sensitivity: Tracking -158 dBm
	  Acquisition & Reacquisition -148 dBm
	  Cold Starts -142 dBm
	• Timing Accuracy: RMS - 50 ns, 99% <100 ns
	• Operational Limits: Velocity - 515 m/s (1000 knots)
	
	* Depends on accuracy of correction data provided by the DGPS or SBAS service.

INTERFACE	• Protocols: NMEA, UBX Binary, RTCM
SUPPORTED SATELLITE SYSTEMS	• DGPS, WAAS, EGNOS, MSAS
GPS ANTENNA	• 25x25 mm Passive Patch Antenna

IMPORTANT NOTE!

Prior to using this GPRS/GSM device, you must contact a GSM service provider, such as T-Mobile® or AT&T® (Cingular) and arrange for a Service Plan. With this plan you will be provided with a SIM card which must be installed in this device, in order to communicate on the Service Provider's GSM network.

DIMENSIONS

• **Height of JETT with module:** 11.46 in. (291 mm)
• **Depth of JETT with module:** 2.77 in. (70.3 mm)

WEIGHT

• **Weight of JETT with module:** 2.5 lbs. (1133 grams)

Available for all PACK Ready JETT•XL® and JETT•eye™ units.

The JETT•PACK Laser Scanner contains a high performance scan engine which is capable of reading a wide variety of 1D barcodes. This device offers durability and reliability, all in a package that can easily be carried in a shirt pocket. The JETT•PACK Laser Scanner is ideal in applications where having the ability to read barcodes is not required on a regular basis and a modular solution is desired. When the barcode scanner is not required, it can be removed from the device.

TECHNICAL SPECIFICATIONS @ 23°C

BAR CODE SYMBOLOGIES	• Code 39 • UPC/EAN/JAN • MSI • Code 128 • Code 9 • Codabar • Interleaved 2 of 5 • Discrete 2 of 5 • RSS-14 • RSS-Limited/Expanded Stacked
SCAN REPETITION RATE	• 92 min., 104 typical, 116 max. scans/sec (bidirectional)
LASER POWER (AT 650 NM)	• 1.7 mW (± 0.2 mW) scan mode; 0.5 mW (± 0.05 mW) aim mode
OPTICAL RESOLUTION	• 0.004 in. minimum element width
PRINT CONTRAST	• Minimum 25% absolute dark/light reflectance measured at 650 nm.
SCAN ANGLE	• 47° ± 3° (Does not require margin on either side of the bar code to decode)
DECODE DEPTH OF FIELD	• Contact us for more information
CLASS 2 DECODE DISTANCES	• 2.2 to 30+ inches (depending on symbol size, symbology, label media, W-N Ratio, and scan angle)
LASER SAFETY	• IEC60825-1 Class 2
OPERATING TEMPERATURE (CHASSIS)	• -4° F to 140° F (-20° C to 60° C) (PACK only)
STORAGE TEMPERATURE	• -40°F to 158° F (-40° C to 70° C) (PACK only)
HUMIDITY	• 5% to 95% (non-condensing)

- Superior working range on all bar code densities
- Steady and crisp easy to view scan line
- 104 scans/second nominal
- Low power consumption that maximizes battery life
- Fast decode time: typical 40 milliseconds
- AIM mode for long range scanning
- Blink mode
- Flash upgradeable
- Remote scan engine diagnostics/status reporting capability built in

Symbol Density/ Bar Code Type/ W-N Ratio	Bar Code Content/ Contrast[1]	47° Typical Working Ranges		47° Typical Working Ranges	
		Near	Far	Near	Far
4.0 mil Code 39; 2.5:1	**ABCDEFGH** 0% MRD	**1.00 in** 2.50 cm	**5.50 in** 13.97 cm	**2.20 in** 5.60 cm	**3.20 in** 8.13 cm
5.0 mil Code 39; 2.5:1	**ABCDEFGH** 0% MRD	**1.25 in** 3.18 cm	**8.00 in** 20.32 cm	**2.20 in** 5.60 cm	**5.50 in** 13.97 cm
7.5 mil Code 39; 2.5:1	**ABCDEF 80** MRD	**1.50 in** 3.81 cm	**13.00 in** 33.02 cm	**2.00 in** 5.08 cm	**9.50 in** 24.13 cm
10 mil Code 39; 2.5:1	**ABCDE 90%** MRD	**1.50 in** 3.81 cm	**18.00 in** 45.72 cm	**1.75 in** 4.45 cm	**14.00 in** 35.56 cm
13 mil 100% UPC	**12345678905** 90% MRD	**1.50 in** 3.81 cm	**24.00 in** 60.96 cm	**1.75 in** 4.45 cm	**18.00 in** 45.72 cm
15 mil Code 39; 2.5:1	**ABCD** 80% MRD	**1.50 in** 3.81 cm	**28.00 in** 71.12 cm	**1.75 in** 4.45 cm	**21.00 in** 53.34 cm
20 mil Code 39; 2.2:1	**123** 80% MRD	**1.75 in** 4.45 cm	**33.00 in** 83.82 cm	**x**	**27.00 in** 68.58 cm
40 mil Code 39; 2.2:1	**AB** 80% MRD	**x**	**36.00 in** 91.44 cm	**x**	**28.00 in** 71.12 cm
55 mil Code 39; 2.2:1	**CD** 80% MRD	**x**	**45.00 in** 114.30 cm	**x**	**34.00 in** 86.36 cm

Notes:
1. CONTRAST measured as Mean Reflective Difference (MRD) at 650 nm.
2. Near ranges on lower densities (not specified) are largely dependent upon the width of the bar code and the scan angle.
3. Working range specifications at ambient temperature (23°C), Photographic quality symbols. pitch=10°, roll=0°, skew=0°, ambient light < 150 ft-candles.
4. X - Dependent on width of bar code.
5. Distances measured from front edge of chassis.

DIMENSIONS

LASER SCANNER PACK
- **Weight:** 3.97 oz (112.54 g)

Need more information? We are constantly updating our website with whitepapers, articles, press releases and case studies. Visit us today: **www.2T.com**

Ramp Up Mobile Computing Sales Revenue
Business Solutions, July 2007

Helping parking operations maximize their revenue and service levels is leading to this software developer's projected 30% sales revenue growth this year. According to Mike Simmons, CEO at T2 Systems, the software developer's latest hand held partner, Two Technologies, has a mobile computing product that uniquely meets the needs of parking industry customers. The JETT•eye allows parking professionals to capture data in the field and send it to the office in real time, including a clear image of the license plate and/or the violation in question.

A Tasty Deal
The Manufacturer, June 2007

Applied Principles Improves Quality Control with the JETT•eye
"The original specification was for a PDA with separate camera and a bluetooth temperature gauge," said JJ Kotze of Applied Principles. "We came across Two Technologies, who had developed an all-in-one PDA with a five megapixel camera, barcode scanner and the facility to add expansion packs like a temperature meter. We developed the temperature module with the help of Centron Solutions, in Dublin." The units also have GPS and GPRS, so the farmer can take them into the field, take a photograph of the produce in the ground – location confirmed by GPS – produce a barcode and despatch the fruits or vegetables when the order is confirmed via GPRS. And this all takes place in real time.

Restoring Order at the Border
RFID Product News, May 2007

Two Technologies' JETT®•RFID is the key component of Mexican customs administration's new vehicle registration system. "Implementation of the SVR solution for AGA/CAAAREM has proven Americas Resources to be a highly capable RFID systems integrator and solution provider," says Guillermo Gutiérrez F., Americas Resources. "Its successful results have been gradually creating opportunities for similar programs. Integration of the JETT®•RFID handheld computers played a particularly important role in this by demonstrating its performance capabilities with no failures to speak of. This in turn helps Americas Resources minimize the technical support required by the customer."

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ISO 9001
Registered
Management System

CE

RoHS