



Solutions. Technology. Simple.

Airo® I-Safe™ 28



- **ATEX Zone 1, IECEx Zone 1 (World Certification)**
- **Super-rugged - IP67, MIL-STD-810-F/G**
- **eButton™ - Emergency Response Service**
- **Intrinsically safe 3.2 MP digital camera**
- **Data Capture (Optional): Barcode, RFID, Smartcard, Biometric scanner, Zigbee wireless**

The Airo® I-Safe™ 28 is designed and manufactured to meet the highest standards of safety under international standards, including the US Underwriters Laboratory Standard 913 (UL-913), the EU ATmosphères EXplosives (ATEX) Directive, and the IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System), which together provide Airo's world-wide certification coverage for global enterprises. These are highest level certifications, for instance the ATEX certification is under standard EN 60079-11 the ATEX assessment criteria for Zone 1 explosive atmospheres carrying the Marking: ATEX II 2G Ex ib IIC T4 (IECEx Gb). In addition, the Airo® I-Safe™ 28 operates on 600+ HSPA+/UMTS networks worldwide. This combination enables workers in hazardous

gas and dust environments around the world to maintain communications, run applications and capture mission critical data in a small, lightweight, use-anywhere smartphone, with confidence.

Features

Thousands of Business Specific Applications: Airo® handsets run the software used by all the world's top corporations, from Microsoft Office and Outlook, to applications written specifically to address problems in Compliance, Regulation, Operations, Lone Worker Protection and Emergency Response.

Super-Rugged for Enterprise Use: Tested tough to very high standards - IP67 certification means excellent dust, dirt and water resistance, while MIL-STD-810-F/G ratings for Drop, Shock, Vibration, Humidity, Water, Sand & Dust means its tough enough for the U.S. Military, or your workforce. Drop it on a concrete floor or in a muddy jobsite without missing a step.

Best-in-Class GPS Capture: Not only does Airo® give you very precise location information and blazing fast Time-To-First-Fix, you also get anti-jamming technology to further ensure good, clean, geo-located data to run your enterprise, and keep track of human assets.

Emergency Response: When activated by a user, eButton™ simultaneously delivers location data and connects a voice call at the push of a button, launching a proprietary "Triage" function that allows users to communicate in a customised protocol to designated response centers, keeping your field forces and business safer.

Global Remote Management: Airo® devices enable Mobile Device Management so you can manage all your devices including things like user rights and privileges, response escalation, messaging protocols, remote device management, tracking/location, geo-fencing (inclusion/exclusion), routing, rescue service provisioning, enterprise peripheral data management, and remote login/logout dead man alert, among others to generate maximum value in the place where things happen... the work site.

Superior Security: In a time when wireless communications are easily intercepted, Airo® offers 256 AES voice and data encryption to ensure that private information remains private and controlled, while devices can be remotely wiped or bricked in order to provide even more security.

Intrinsically Safe High Res 3.2 MP Digital Camera: In times of high regulation and record keeping demands, the camera is useful to capture visual data, like pictures of conditions on the ground, video of problem areas, or even to capture barcodes without an unwieldy enterprise device.

Field Force Management: The perfect tools for managing your human assets, Airo® devices run all the best logistics, route planning and assets tracking programs, and are built for PTT use. Excel at intelligent scheduling and dispatching of assets to different locations, while minimising costs and maintaining great customer service.

Proprietary Middleware Service: Airo® middleware enables highly secure, low latent (worldwide), low cost, two-way data communications that allow you to integrate beneficial back-office applications (your custom app, third-party app, etc.) into your mobile environment, lowering TCO and creating greater control and consistency across your IT infrastructure.

Ongoing Support: You can act with confidence knowing that the Airo® I-Safe™ 28 will be around. Support is planned for three years and the popularity of the device ensures it. For ease of use and incorporation, leasing and Premium Care are offered.

Technical Specifications

PHYSICAL SPECIFICATIONS

Super Rugged Monoblock

Base Dimensions: 142.2mm x 68mm x 24.4mm

Weight: 296 grams

Display Type: Resistive Touch (works with gloves)

Size: 2.8 inch diagonal (320x240)

Color: TFT, 16 million colors, luminous

Color Depth: 16 bit/pixel

Backlight: Low Power LED

Keyboard: QWERTY Touchscreen, Alphanumeric

Expansion Slot :2 Gigabyte microSD slot

Audio Enhanced Audio with Noise Cancellation

Dedicated Speakerphone

Audio jack 3.5mm Barrel Jack

Notifications Alert LED's, Audio Notices, Vibratory Notices

ENVIRONMENTAL

Certifications Ingress Protection 67

Military Standard 810 F/G

Achievements Temperature: -20C to 50C (-4F to 122F)

Drop: 1.25 M drop to concrete 26 times

Shock: 20 G's peak

Vibration: 0.001 g2/Hz at 12.5 Hz, 0.034 g2/Hz at 20-40 Hz, 0.0000057 g2/Hz at 200 Hz, 1 hr/axis duration

Humidity: 95% for 48 hours

Water: 26.5 Liters of water per 929 cm2

Sand/Dust: Zero ingress of sand/dust

Sealing: Meets and exceeds IP 67 performance

PERFORMANCE SPECIFICATIONS

Operating System: Microsoft Windows Embedded Handheld 6.5

CPU: Marvell® XScale PXA270, 640 MHz

Instruction Set - ARMv5TE

Memory: ROM Type - Flash EEPROM

RAM - 128MB

Flash - 128MB

2GB microSD Capacity

BATTERY

Type: Lithium Ion Polymer

Capacity: 1960 mAh at 3.7V

Standby Time: 250 hours

Talk Time: 6 hours (WAN)

NETWORKS

Five Band UMTS 800/850/1900/AWS/2100 MHz

Quad Band GSM 800/850/1800/1900 MHz

UMTS/HSPA+, 3GPP Release 6/7

WI-FI

Radio: Tri-Mode IEEE® Wi-Fi 802.11 a/b/g/n

Security: WPA2, 802.1x, EAP-TLS/TTLS, PEAP/LEAP, EAP-FAST

Voice-Over-IP (VOIP) Ready

DATA

HSDPA/HSUPA data rate: DL-3.6/7.2/14.4 Mbps

UL- 2.0/5.76 Mbps

UMTS data rates: DL and UL Max 384 kbps

Bluetooth®: Class III & IV v2.1

USB v2.0 (miniUSB) High Speed - Host & Client

INTRINSIC SAFETY CERTIFICATIONS

Underwriter Laboratories UL 913 - Class 1 Division 1 Rating

ATEX Zone 1

IECEX Zone 1 (World Certification)

Canadian Standards Authority CSA-C22.2 No. 157-92

NETWORK-INDEPENDENT GPS

Integrated standalone with A-GPS

2 Meter or better Accuracy

6 Second or better Time-To-First-Fix

Hybrid GPS/SBAS engine (WAAS, EGNOS, MSAS)

20K real-time correlations

Variable-length integration for superior performance

-162dBm for deep-indoor & poor GPS signal

-148dBm from cold start

<1.5µW standby power

Anti-jamming technology

Extra-low power consumption/location fix

INTRINSICALLY SAFE CAMERA

Type: 3.2 megapixel color

Focus: Autofocus

Video: up to 30 FPS

Resident Data Capture: Photo, Video, 2D/1D Barcode

DATA CAPTURE (Optional)

Barcode: Common Linear Codes and Other Linear Codes

Postal Codes

2D and Stacked Linear Codes

Optical Character Recognition Fonts

RFID: Low Frequency 125 - 134.2 kHz tags

High Frequency 13.56 MHz tags

Ultra High Frequency 860-960 MHz tags

HID eProx

Smartcards: Read and Write Capable

Memory Cards, Processor Cards, Proximity Cards

Biometric Scanner: FIPS compliant capture of fingerprint data

Zigbee Wireless: Standard Zigbee firmware or Customized Zigbee Firmware

Dex: Serial I/O connectivity - RS232 (custom formats available)

WARRANTY

Standard 1 year warranty against defects in workmanship and materials from date of shipment for unmodified devices operated under normal/proper conditions.

Extended 3 Year Warranty Available.

Premium Service Available.

OPTIONAL ACCESSORIES

Charging - International plugs, Car Chargers, USB

Vehicle Mounts

Silicon Jackets, Holster Cases, Spare Batteries, Spare Stylus

OPTIONAL SERVICES

GroupLocate™

GroupCommand™

eButton™ - Emergency Response Service

Mapping Client Application with Group View

Remote Upgrade with On-The-Fly Update

Web-Based Device Management

Situational Awareness System™

Push-To-Talk: OMA PoC PTT Private Client

AES 256 Encryption

Language Packs

