

Sierra

G60 Mobile Inspection Assistant

THE WORLD'S FIRST
3-IN-1 INDUSTRIAL HANDHELD



**THERMAL
IMAGER**



**PUSH-TO-
TALK
RADIO**



**RUGGED
SMARTPHONE**

Now



Explosion Proof



Contact-Less



Accuracy

G60

- Smartphone
- Push-to-talk
- Thermal Imager
- Digitized Notes

Past

Workers are less agile and efficient
when fully equipped.



Walkie-Talkie



Pen &
Paper Notes



Smartphone



Thermal
Detector

System

CPU	MediaTek MT8768 Octa-core (4x Cortex A53 2.0GHz / 4x Cortex A53 1.5GHz)
OS	Android 11 (GMS)
Memory	4GB
Storage	64GB
Micro SD	Support SDIO 3.0 Protocol (up to 128GB)

WWAN

WLAN/WiFi	802.11 a/b/g/n/ac
Bluetooth	Class 1, Bluetooth v5.0, (BLE)
GPS/AGPS	GPS/Beidou/GLONASS (Band 900/1800;33dBm)
Wireless	UMTS/HSPA+ Primary FDD-LTE:1/2/3/4/5/7/8/12/17/19/20/28/ TD-LTE: 40

Peripherals and Devices

Camera	Front: 5M with FF, Rear: 13M OIS with AF
Audio	Vibrator, Receiver / Speaker, Mic, Headphone Jack
Flash	Yes
SIM	2 x Micro Sim
Torch	Yes
OTG	Yes
PTT	YES (Maximum distance around 5KM)
RFID	NFC Embedded(ISO 14443 Type A/B and ISO 15693)
NFC	Yes
Aimer	Yes
Thermal	80 x 60 Pixel Scene Dynamic range:-10°C ~ 140°C Radiometric Accuracy: Greater of ±5°C or 5% (Typical)

* The thermal imager is to detect the temperature difference between the target and the surroundings. The temperatures are for reference only.

I/O Interface

Cradle Interface	VIN 9V/USB D-/USB D+/GND/5V OUT/UART TX/ UART RX/ADC/USB ID/GND
Key	Power/+/-/SOS/UD1/UD2/UL/REC/CAM/PTT

LCD Display

Size/Type	5"HD TFT
Resolution	720 (W) x 1280 (H)
Brightness (cd/m ²)	500cd/m ² (with TP) 25% Default
Touch Screen	5 Points Capacitive Touch (PCT)

Power Supply

Battery Capacity	5100mAh
Charging Time	Up to 4hours
Cruising Endurability	8~10hrs

Mechanical & Environmental

Operating Temperature	-10°C ~ 55°C
Storage Temperature	-20°C ~ 65°C
Dimensions(mm)	181.7(H)x87.2(W)x30.9(D)mm 274.7(H)x87.2(W)x30.9(D)mm(with antenna)
Weight	531g
IP Rating	IP67
Drop	1.5m

Certification of Explosion Protection

Certification	CE; ATEX ic IIC T5 Gc
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Ordering Information

Part No.	Description
7400600203001M	G60 Mobile Inspection Assistant integrated with the thermal imager, push-to-talk, and smartphone

Packing Information

Part No.	Item	Description	Q'ty
691000600000M	USB Cable	Data and Charger Cable	1
2214038519000P	Rechargeable Li-Ion Battery	Typical 3.8V, 5100mAh	1

Optional Accessories

Part No.	Item	Description	Q'ty
2214038519000P	Rechargeable Li-Ion Battery	Typical 3.8V, 5100mAh	1
7405000710007M	Charging Cradle	Input: 12V/2A Output: Phone DC 9V/2A Battery DC 4.35V/2A	1
5490101150000M	Adapter	Input:100-240V~50/60Hz 0.8A Max Output:12V/2A	1
3432122000780P	Micro USB Cable	1m	1
6900005000050M	Hand Strap	132(L) x 26.5(W) mm Customized	1

G60 PRO

Hazardous-Area Push-to-Talk & Thermal Inspection

Ex ATEX[®] Zone E X SIERRA

Push-To-Talk (PTT)
Instant · Network-Independent · Certified

Thermal Imaging
Detect Heat Anomalies Early

5 km

G60 Pro

Push-to-Talk (PTT) & Thermal Inspection Device for Hazardous-Area

Product Overview



The graphic features a light gray background with a white horizontal band at the top. On the right side of this band are three certification logos: a yellow hexagon with 'Ex', a blue 'CE' mark, and a blue 'IECEX' mark. Below the band, the text 'G60 Pro' is written in a large, bold, dark blue font. Underneath, 'Hazardous-Area Push-to-Talk & Thermal Inspection' is written in a smaller, dark blue font. To the left of the center, there are two feature descriptions: 'Push-to-Talk (PTT)' with a green square icon containing 'PTT' and the text 'Instant · Network-Independent', and 'Thermal Imaging' with a red and orange thermal image icon and the text 'Detect Heat Anomalies Early'. Below these is a paragraph: 'G60 Pro replaces radios and standalone thermal cameras by delivering instant Push-to-Talk communication.' On the right side of the graphic, two G60 Pro devices are shown. The one on the left has a black screen displaying 'Push-To-Talk' and a green 'PTT' button. The one on the right has a black screen displaying a thermal image of a structure with a temperature reading of '87°C' at the top.

G60 Pro

Hazardous-Area **Push-to-Talk** & Thermal Inspection

PTT **Push-to-Talk (PTT)**
Instant · Network-Independent

Thermal Imaging
Detect Heat Anomalies Early

G60 Pro replaces radios and standalone thermal cameras by delivering instant Push-to-Talk communication.

The **G60 Pro** is a **purpose-built hazardous-area field device** that combines **mission-critical Push-to-Talk (PTT) communication** with **integrated thermal inspection** on a single **intrinsically safe, ATEX/IECEX-certified platform**.

It enables industrial teams to **communicate instantly** and **identify thermal anomalies early**—directly inside classified environments where conventional radios, smartphones, and thermal cameras are not permitted.

Thermal Imaging for Hazardous Areas



Integrated Thermal Inspection

The G60 Pro integrates a **built-in thermal imaging camera**, enabling **non-contact temperature measurement** and **early fault detection** directly inside hazardous areas—without the need for additional Ex-certified devices.

Early Anomaly Detection

Thermal imaging enables rapid identification of:

- Overheating electrical panels, MCCs, and cable terminations
- Hot bearings, motors, and rotating equipment
- Abnormal heat patterns in pumps, valves, and flanges

This supports **predictive and preventive maintenance**, reducing unplanned downtime and safety incidents.

Visual & Thermal Documentation

- Capture thermal images and videos in classified zones
- Combine visual and thermal evidence for faster diagnosis
- Support maintenance records, audits, and investigations

**THERMAL IMAGING APPLICATIONS
FOR HAZARDOUS AREAS (ATEX ZONE 2)**

Non-contact thermal inspection using intrinsically safe mobile devices

Reactor Temperature Monitoring

Motor Overheating Detection

Pump & Bearing Overheating

Valves & Flanges Overheating

Valves & Flanges Overheating

Cable Trays & Electrical Panels

ATEX SIERRA Ex

FIRE & HEAT Anomaly Protection

Push-to-Talk (PTT) Communication

The diagram illustrates Direct Mode Operation (DMO) for ATEX Zone 2 mobile phones. It features two rugged mobile phones, one on the left and one on the right, connected by a dashed yellow line representing a 5 km communication range. The left phone's screen displays 'Push-To-Talk' and a green 'PTT' button. Above the phones, a yellow hexagonal symbol with 'Ex' is labeled 'ATEX Zone 2'. The text 'DMO - Direct Device-to-Device PTT (5 km)' is positioned at the top left. Below the phones, the text 'Direct Mode Operation' is written in bold, followed by 'Communicates directly without network dependency'. In the bottom right corner, the 'ATEX SIERRA' logo is displayed.

DMO - Direct Device-to-Device PTT (5 km)

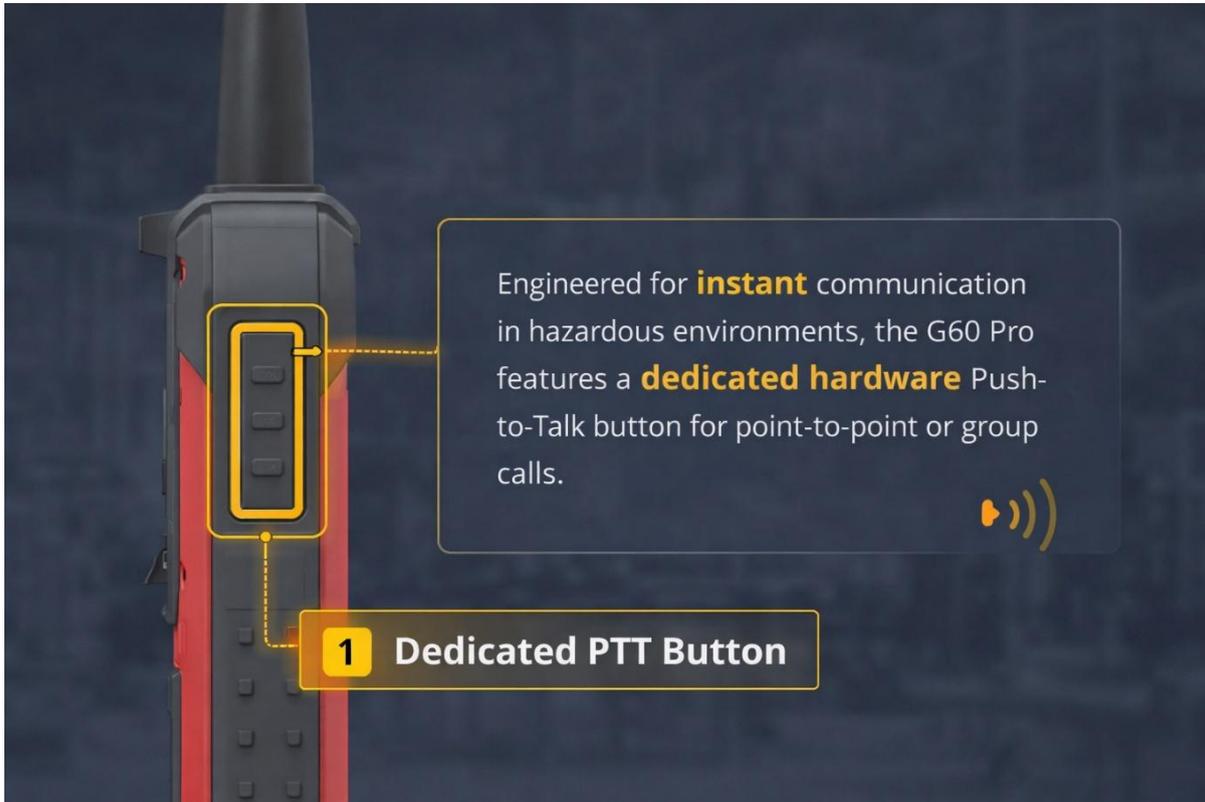
ATEX Zone 2

5 km

Direct Mode Operation
Communicates directly without network dependency

ATEX SIERRA

Instant One-Touch Communication



The G60 Pro features a **dedicated hardware PTT button**, enabling immediate voice communication without dialing or call setup delays. Designed for **glove and PPE operation**, it ensures reliable communication in **high-noise, safety-critical environments**.

Direct Mode Operation (DMO) – Network-Independent PTT



With built-in **Direct Mode Operation (DMO)**, the G60 Pro enables **device-to-device Push-to-Talk communication** without reliance on cellular or Wi-Fi networks.

- Automatic DMO activation at startup
- **Up to 5 km communication range** (line-of-sight)
- Reliable operation during network outages, remote operations, and emergencies

Group & Broadcast Communication

The G60 Pro supports **individual, group, and broadcast PTT calls**, enabling real-time coordination across field teams, maintenance crews, supervisors, and emergency responders.

PTT Applications

G60 PRO

Hazardous-Area **Push-to-Talk** & Thermal Inspection

Ex ATEX[®] Zone E X **SIERRA**

Push-to-Talk (PTT)
Instant · Network-Independent · Certified

Thermal Imaging
Detect Heat Anomalies Early

5 km

The advertisement features two rugged mobile phones held by workers in a hazardous industrial setting. The phone on the left displays a 'Push-to-Talk' interface with a green 'PTT' button. The phone on the right displays a thermal imaging view of a hot industrial process. A dashed line with radio waves at both ends indicates a 5 km communication range between the two devices. The background shows an industrial facility with smokestacks and pipes under a hazy sky.

- Field operations and operator rounds
 - Permit-to-work execution and maintenance coordination
 - Shutdowns and turnarounds
 - Emergency response and incident escalation
 - Lone-worker communication and safety
-

G60 Pro Technical Specifications

G60 Pro Push-to-Talk (PTT) Communication

In hazardous industrial environments, communication must be **instant, reliable, and intrinsically safe**. Delays caused by dialing, network dependency, or non-certified devices can significantly increase operational and safety risks.

The G60 Pro is purpose-built for **Push-to-Talk (PTT) communication in hazardous areas**, enabling one-touch, one-to-many voice communication for field operations, maintenance teams, and emergency response personnel.

- **Instant One-Touch Communication**
With a dedicated hardware PTT button, the G60 Pro enables immediate voice communication without dialing or call setup delays. Operators wearing gloves or full PPE can communicate instantly, even in high-noise industrial environments.
- 👥 **Group & Broadcast Communication**
The G60 Pro supports both point-to-point and group PTT calls, allowing supervisors, operators, and safety teams to coordinate in real time. This makes the G60 Pro ideal for:
 - ❖ Remote plants and tank farms
 - ❖ Utilities and off grid facilities
 - ❖ Shutdowns and turnaround environments

Why G60 Pro for Hazardous-Area PTT

- Instant one-touch Push-to-Talk
- DMO - Direct communication up to 5 km
- Group and broadcast calling

Category	Specification	Why It Matters
Push-to-Talk (PTT)	Dedicated hardware PTT button	Instant, glove-friendly communication without dialing
Direct Mode Operation (DMO)	Device-to-device PTT up to 5 km	Ensures communication without network dependency
Group Communication	Individual, group & broadcast PTT	Enables one-to-many coordination and emergency alerts
Thermal Imaging	Integrated thermal camera (80 × 60)	Detects overheating assets inside hazardous zones
Hazardous-Area Compliance	ATEX / IECEx certified, intrinsically safe	Safe operation in explosive gas and dust environments

Hazardous-Area Compliance

The G60 Pro is **ATEX / IECEx certified**, ensuring safe operation in explosive atmospheres. Its intrinsically safe architecture enables **digital communication and thermal inspection inside hazardous zones**—without compromising safety or regulatory compliance.

Why G60 Pro

- Combines **PTT communication and thermal inspection** in one certified device
 - Eliminates the need for multiple Ex-certified tools
 - Enables faster decisions, safer operations, and reduced downtime
 - Designed specifically for safety-critical industrial environments
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G60 Pro replaces radios and standalone thermal cameras by delivering instant Push-to-Talk communication and thermal inspection on a single hazardous-area platform.