

MT-100-Smart-Ex-201



- Intrinsically safe, ultra-robust 4-inch smartphone with LTE/ WiFi/ Android
- For hazardous zones 2, 22 and Class I, Div 2
- Sunlight-readable display, powerful battery and loudspeaker

WebCode MT100A

R. STAHL's intrinsically safe MT-100 Smart-Ex-201 series smartphones are mobile HMI systems for zones 2 and 22 as well as Class I, Div 2, certified according to ATEX, IECEx, CSA and NEC. Their waterproof and dustproof enclosure (IP68) makes them exceedingly robust, and they can withstand temperatures ranging from -20 °C to +55 °C. The luminous multi-touch display remains legible even in direct sunlight and can be operated precisely with gloved or wet fingers, and the 8 MP camera provides clear on-site photos. These smartphones can be used worldwide with all networks, and function without SIM lock. More than 700,000 apps are available via the Google Play Store, and the FOTA function (Firmware Over The Air) keeps the firmware always up to date.

Technical Data

General

HMI Technology	Mobile Device
Type	Mobile smart phone
HMI WebCode	MT100A

Explosion Protection

Application range	2 22
Certifications	ATEX IECEX NEC CEC
Certification IECEx	EPS 15.0031X
Certification ATEX	EPS 15 ATEX 1 994 X
Certification NEC	70029337
Certification CEC	70029337
Gas explosion protection IECEx	Ex ic IIC T4 Gc IP64
Dust explosion protection IECEx	Ex ic IIIB T135 °C Dc IP64
Gas explosion protection ATEX	II 3 G Ex ic IIC T4 Gc IP64
Dust explosion protection ATEX	II 3 D Ex ic IIIB T135 °C Dc IP64
Explosion protection NEC	Class I, Division 2, Groups A, B, C, D, T4
Explosion protection CEC	Class I, Division 2, Groups A, B, C, D, T4

Electrical Data

Processor type	MSM8926
Processor details	1.2 GHz; Quad core
RAM	1 GB

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Electrical Data

Data memory	16 GB
Application memory	12 GB
Operating system	Android 4.4.4 (Kitkat)
Language support	Multilingual operating system
Additional software	Google Play Store certified
Interfaces	- Headphone connector (Non-Ex), 1 x 3.5 mm - USB loading cable connection, secured with magnet
Telephone Europe	B1, B3, B7, B8, B20, B38 (TDD) Quad Band UMTS 850 / 900 / 1900 / 2100 MHz Quad Band GSM 850 / 900 / 1800 / 1900 MHz 4G / LTE standard MIMO antenna for LTE
Telephone USA	B1, B2, B3, B4, B5, B7, B8, B12, B17 Quad Band UMTS 850 / 900 / 1900 / 2100 MHz Quad Band GSM 850 / 900 / 1800 / 1900 MHz 4G / LTE standard MIMO antenna for LTE
Smartphone functions	Accelerometer, Gyro compass, Auto light sensor
Navigation	GPS, GLONASS
NFC	13.56 MHz
E-mail Client	EAS, Gmail, POP3, IMAP
Cameras	AF camera, 8 Mpx (camera at the back with LED flash) FF camera, 1 Mpx (camera at the front)
Audio	Dual microphone with noise reduction 19 mm loudspeaker with Gore® protection valve, volume up to 103 dB
Torch function	LED
Special keys	PTT (Push-to-Talk / Alarm / Power)
Battery	Lithium-Ion 4800 mAh, 1000 hours stand-by, 40 hours talking
WLAN	Wi-Fi 802.11 a / b / g / n dual band, WiFi Direct, WiFi Hotspot
Bluetooth	Bluetooth 4.0
Front camera	yes

Display

Display version	TFT Colour display
Display version 2	16.2 million colours
Display size inch	4
Display size centimetres	10
Display resolution	HD
Total pixels	480 x 800
Display dimensions	15:9
Display brightness	readable in direct sunlight
Display contrast	250:1
Touch screen	capacitive
Backlight	LED Technology
Front plate (display)	Front made of shock-proof glass (Gorilla® Glas 2)

Ambient Conditions

Storage temperature	-20 °C ... +55 °C
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MT-100-Smart-Ex-201

Mechanical Data

Dimensions	137 mm x 72.1 mm 26.9 mm
Weight	0.29 kg
Material front	Specially hardened glass front plate
Material back	Robust synthetic material
Ingress protection	IP68 (2 m, 30 min.)
IP enclosure front	IP68
IP enclosure back	IP68

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.