



REALWEAR NAVIGATOR Z1

HEAD MOUNTED TABLET

APPROVAL

I M1 Ex ia I Ma
Ⓢ II 2G Ex ib IIC T4 Gb
Ⓢ II 2D Ex ib IIIC T200°C Db
Ex ib IIC T4 Gb
Ex ib IIIC T200°C Db
Class I Div. 1 Groups A, B, C, D, T4
Class II Div. 1 Groups E, F, G, T200°C
Class III

OPERATING SYSTEM

Android™ 12 (AOSP) + WearHF™
hands-free interface

DIMENSIONS

weight: 383 g

DISPLAY

0,35", 24° field-of-view, 24-bit color LCoS,
outdoor visible, resolution 720 x 1280 px

THERMAL CAMERA MODULE

Thermal sensor: FLIR Lepton® 3.5,
Thermal resolution: 160 x 120,
Effective frame rate: 8.7Hz,
FOV: 57° (H) nominal | 71° (D) nominal,
Object temp. range: -20 to 400 °C,
Thermal sensitivity (NETD): <50mK,
Spectral range: 8 to 14µm,
Accuracy - High gain Mode: Greater of
+/- 5 °C or 5% (typical), Low gain Mode:
Greater of +/- 10 °C or 10% (typical)

VISUAL CAMERA

48 MP AF, PDAF with LED flashlight,
up to 1080p @ 60 fps, >6x zoom in
HD, video stabilization, codecs: VP8,
VP9, H.264, H.265 HEVC

WIRELESS COMMUNICATION

Bluetooth® 5.2, Wi-Fi® 6/6E, GPS,
GLONASS, Beidou, Galileo, NavIC,
QZSS, SBAS

PROCESSOR

Qualcomm® SQCS6490

MEMORY

8 GB RAM, 125 GB internal memory

INCLUDED APPLICATIONS

document navigator, camera with
barcode reader, audio recorder, video
recorder, webpage viewer, cloud sync,
media player, calculator, pedometer,
timer

BATTERY

2550 mAh, replaceable and
rechargeable, for full shift use

DEGREE OF PROTECTION

IP66
MIL-STD 810H
usable from -20 °C to +55 °C



IS-TH2ER.1

HANDHELD BARCODE-SCANNER

APPROVAL

Ⓢ II 2G Ex ib op is IIC T4 Gb
Ⓢ II 2D Ex ib op is IIIC T135°C Db
Ex ib op is IIC T4 Gb
Ex ib op is IIIC T135°C Db
Class I Div. 1 Groups A, B, C, D, T4
Class II Div. 1 Groups E, F, G, T135°C
Class III Div. 1

DIMENSIONS

weight: 370 g
size: 192,3 x 95,84 x 146 mm

INDICATION FUNCTION

loudspeaker
vibration
LED display

COMMUNICATION

over the multi functional
ISM interface

POWER SUPPLY

over the connected device,
this can be charged via the Trigger
Handle

SCAN TYPES

ER (extended range)
with Zebra SE55 up to 12 m



IS-SW1.1

SMARTWATCH

APPROVAL

Ⓢ II 2G Ex ib IIC T4 Gb
Ⓢ II 2D Ex ib IIIC T135°C Db
Ex ib IIC T4 Gb
Ex ib IIIC T135°C Db
Class I Div. 1 Groups A, B, C, D, T4
Class II Div. 1 Groups E, F, G, T135°C
Class III Div. 1 T4

OPERATING SYSTEM

ISM-OS

DIMENSIONS

weight: 70 g
size: 53,95 x 45,4 x 17,6 mm

DISPLAY

1,6" touchscreen with a
resolution of 320 x 360 px

BATTERY

500 mAh

WIRELESS COMMUNICATION

Bluetooth® 5.1, Wi-Fi® 2,4 GHz, GPS,
GLONASS, Beidou, Galileo, NFC

SENSORS

Pulse, SpO₂, accelerometer,
gyroscope, magnetic, pressure

MEMORY

1 GB RAM, 8 GB internal
memory

SAFETY FUNCTIONS

SOS key, LWP ready*

VIBRATION ALARM

DEGREE OF PROTECTION

IP68
MIL-STD 810H
usable from -10 °C to +55 °C



IS-RSM3x.1

REMOTE SPEAKER MICROPHONE

APPROVAL

Ⓢ II 2G Ex ib IIC T4 Gb
Ⓢ II 2D Ex ib IIIC T135°C Db
Ex ib IIC T4 Gb
Ex ib IIIC T135°C Db
Class I Div. 1 Groups A, B, C, D, T4
Class II Div. 1 Groups E, F, G, T135°C
Class III

DIMENSIONS

weight: 205 g
size: 104,26 x 64,0 x 32,2 mm

CONNECTION

IS-RSM3A.1 helical cable with 16-pin
ISM connector

IS-RSM3B.1 Bluetooth

BATTERY

2200 mAh

LOUDSPEAKER

>103 dB

MICROPHONE

Electret condenser microphone
Omni-Directional

DEGREE OF PROTECTION

IP68
MIL-STD 810H
operation range -20 to +55 °C

MORE FEATURES

Function key left (PTT)
Up & down key
Function key circular
All keys can be assigned to a
function via the „Button APP“
(except volume +/-)

Mobile phones, smartphones and tablets for ATEX zone 1/21, 2/22, mining and industrial use

The i.safe MOBILE GmbH is your partner for the development, approval and marketing of explosion-proof mobile communication devices. With more than 15 years of experience, i.safe MOBILE GmbH belongs to the most innovative and well-established experts worldwide.

Our priority is development of practice-oriented products based on the legal requirements. We place great emphasis on quality not only in the development of our products, but also by offering customized service to your needs and detailed maintenance plan. To improve upon customer relationship we rely on our authorized worldwide partner network.

In case you need an optimal solution from a technical and economic point of view – i.safe MOBILE GmbH is your expert.

We look forward to have a long-term and trusting relationship with you.

i.safe MOBILE product specifications



IP6X dust and
water protected



impervious to dust and
microparticles



operation range from
-20 °C to +55 °C



RugDisplay-Glass



cleaning with
germicide possible



amplified loudspeaker



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PIONEERING EXCELLENCE

i.safe MOBILE

EN





IS120.1
MOBILE PHONE



IS380.1
4G RADIO



IS440.1
5G RADIO



IS540.1
SMARTPHONE



IS541.1
SMARTPHONE



IS940.1
ANDROID TABLET

IS945.1
WINDOWS TABLET

APPROVAL Ⓔ II 2G Ex ib IIC T4 Gb Ⓔ II 2D Ex ib IIIC T135°C Db Ex ib IIC T4 Gb Ex ib IIIC T135°C Db	MEMORY 2 GB RAM, 16 GB internal memory
OPERATING SYSTEM ISM-OS 11	FREQUENCIES GSM: B2/3/5/8 WCDMA: B1/2/4/5/8 LTE-FDD: B1/2/3/4/5/7/8/20/28 LTE-TDD: 39/B40/B41 LTE-TD: B34/B38
DIMENSIONS weight: 214 g size: 139,2 x 63,2 x 25,7 mm	BATTERY 2200 mAh, replaceable
DISPLAY 2,4" Corning® Gorilla® Glass with a resolution of 240 x 320 px	DEGREE OF PROTECTION IP68 dust-/waterproof MIL-STD 810H usable from -20 °C to +60 °C
WIRELESS COMMUNICATION Bluetooth® 5, Wi-Fi®	
PROCESSOR MT6761D Quad Core, 1,8 GHz	

APPROVAL Ⓔ II 2G Ex ia IIC T4 Gb Ⓔ II 2D Ex ia IIIC T135°C Db Ex ia IIC T4 Gb Ex ia IIIC T135°C Db	PROCESSOR Qualcomm® Snapdragon 662 Octa Core
OPERATING SYSTEM ISM-OS 16	MEMORY 8 GB RAM, 128 GB internal memory
DIMENSIONS weight: 359 g size: 138 x 60 x 32 mm	FREQUENCIES GSM: 850/900/1800/1900 MHz WCDMA: B1/2/4/5/8 4G LTE-FDD: B1/B2/B3/B4/B5/B7/B8/ B12/B13/B14/B17/B18/B19/B20/B25/ B26/B28A/B28B/B29/B30/B66/B71 4G LTE-TDD: B34/B38/B39/B40/B41
DISPLAY 2,4" Corning® Gorilla® Glass V3 with a resolution of 240 x 320 px	BATTERY 3600 mAh, replaceable
WIRELESS COMMUNICATION Bluetooth® 5.1	DEGREE OF PROTECTION IP68 dust-/waterproof MIL-STD 810H usable from -20 °C to +55 °C

APPROVAL Ⓔ II 2G Ex ib IIC T4 Gb Ⓔ II 2D Ex ib IIIC T135°C Db Ex ib IIC T4 Gb Ex ib IIIC T135°C Db Class I Div. 1 Groups A, B, C, D, T4 Class II Div. 1 Groups E, F, G, T135°C Class III	PROCESSOR Qualcomm® QCM6490
OPERATING SYSTEM ISM-OS	MEMORY 4 GB RAM, 64 GB internal memory
DIMENSIONS weight: 307 g size: 136,6 x 70 x 32 mm	FREQUENCIES 4G LTE-FDD: B1/2/3/4/5/7/8/12 with MFB1/13/ 14/17/20/25/26/28/29/ 30/66/68/71 4G LTE-TDD: B38/39/40/41/42/43/48 5G NR: n1/n2/n3/n5/n7/n8/n12/n14/ 20/n25/n28/n30/n38/n40/n41/n48/ n66/n71/n77/n78/n79
DISPLAY 2,4" Corning® Gorilla® Glass, 3rd generation with a resolution of 320 x 240 px	BATTERY 2400 mAh, replaceable
CAMERA 8 MP AF (front)	SAFETY FUNCTIONS function key red (e.g. SOS), side key left (e.g. PTT), LWP ready*, PTT ready*
WIRELESS COMMUNICATION Bluetooth® 5.2, NFC, Wi-Fi®, GPS, A-GPS, GLONASS, A-GLONASS, Beidou, Galileo, NavIC, QZSS, SBAS	DEGREE OF PROTECTION IP68 dust-/waterproof MIL-STD 810H usable from -20 °C to +55 °C

APPROVAL Ⓔ II 2G Ex ib IIC T4 Gb Ⓔ II 2D Ex ib IIIC T135°C Db Ex ib IIC T4 Gb Ex ib IIIC T135°C Db Class I Div. 1 Groups A, B, C, D, T4 Class II Div. 1 Groups E, F, G, T4 Class III Div. 1 T4	PROCESSOR Qualcomm® QCM6490 Octa Core
OPERATING SYSTEM Android™ 14	MEMORY 8 GB RAM, 128 GB internal memory, microSD up to 512 GB
DIMENSIONS weight: 422 g size: 180,0 x 84,9 x 20,6 mm	FREQUENCIES GSM: 850/900/1800/1900 MHz WCDMA: B1/2/4/5/8 LTE-FDD: B1/2/3/4/5/7/8/12 with MFB1/13/ 14/17/20/25/26/28/28/ 29/30/66/71 LTE-TDD: B38/39/40/41/42/43/48 NR: n1/n2/n3/n5/n7/n8/n12/n20/n25/ n28/n30/n38/n40/n41/n48/n66/n71/ n77/n78/n79
DISPLAY 6" Corning® Gorilla® Glass, 3rd generation, resolution of 1080 x 2160 px	BATTERY 4400 mAh, replaceable
CAMERA 48 MP AF (rear), 5 MP FF (front)	SAFETY FUNCTIONS function key red, LWP ready*, PTT ready*
WIRELESS COMMUNICATION Bluetooth® 5.2, NFC, Wi-Fi® 6, GPS, A-GPS, GLONASS, Beidou, Galileo	DEGREE OF PROTECTION IP68 dust-/waterproof MIL-STD 810H usable from -20 °C to +55 °C

APPROVAL Ⓔ II 2G Ex ia IIC T4 Gb Ⓔ II 2D Ex ia IIIC T135°C Db Ex ia IIC T4 Gb Ex ia IIIC T135°C Db	MEMORY 12 GB RAM, 256 GB internal memory, microSD card supported
OPERATING SYSTEM Android™ 14	FREQUENCIES GSM: 850/900/1800/1900 MHz WCDMA: B1/2/4/5/8 LTE-FDD: B1/2/3/4/5/7/8/12 MFB1/13/ 14/17/20/25/26/28A/28B/29/30/31/ 66/71/72 LTE-TDD: B38/39/40/41/42/43/48 NR: n1/n2/n3/n5/n7/n8/n12/n20/n25/ n28/n30/n31/n38/n40/n41/n48/n66/ n71/n72/n77/n78/n79
DIMENSIONS weight: 435,6 g size: 180,0/288,0 x 84,9 x 20,6 mm	BATTERY 4400 mAh, replaceable
DISPLAY 6" Corning® Gorilla® Glass, 3rd generation, resolution of 1080 x 2160 px	SAFETY FUNCTIONS function key red, LWP ready*, PTT ready*
CAMERA 48 MP AF (rear), 5 MP FF (front)	DEGREE OF PROTECTION IP68 dust-/waterproof MIL-STD 810H usable from -20 °C to +55 °C
WIRELESS COMMUNICATION Bluetooth® 5.2, NFC, Wi-Fi® 6, GPS, A-GPS, GLONASS, Beidou, Galileo	
PROCESSOR Qualcomm® QCM6490 Octa Core	

APPROVAL Ⓔ II 2G Ex ib IIC T4 Gb Ⓔ II 2D Ex ib IIIC T135°C Db Ex ib IIC T4 Gb Ex ib IIIC T135°C Db Class I Div. 1 Groups A, B, C, D, T4 Class II Div. 1 Groups E, F, G, T155°C Class III	PROCESSOR Qualcomm® QCM6490 Octa Core
OPERATING SYSTEM Android™ 14 (IS940.1) Windows 11 IoT Enterprise (IS945.1)	MEMORY 8 GB RAM, 128 GB internal memory, external memory microSD up to 512 GB
DIMENSIONS weight: 1059 g size: 266,17 x 168,46 x 19,82 mm	FREQUENCIES 4G LTE-FDD: B1/B2/B3/B4/B5/B7/B8/ B12 with MFB1/B13/B14/B17/B20/B25/ B26/B28A/B28B/B29/B30/B66/B71/B68 4G LTE-TDD: B38/B39/B40/B41/B42/ B43/B48 5G NR: n1/n2/n3/n5/n7/n8/n12/n14/ n20/n25/n28/n30/n38/n40/n41/n48/ n66/n71/n77/n78/n79
DISPLAY 10,1" Corning® Gorilla® Glass, 3rd Generation with a resolution of 1200 x 1920 px	BATTERY 8160 mAh, replacable
CAMERA AOS: 50 MP AF (rear), 5 MP FF (front) WIN: 12 MP AF (rear), 5 MP FF (front)	SAFETY FUNCTIONS function key red, PTT ready*, LWP ready*
WIRELESS COMMUNICATION Bluetooth® 5.2, NFC (IS940.1), Wi-Fi 6, GPS, A-GPS, GLONASS, A-GLONASS, Beidou, Galileo	DEGREE OF PROTECTION IP68 dust-/waterproof MIL-STD 810H usable from -20 °C to +55 °C

*Push-to-talk/LWP (third party application required)