LTE VOICE RADIO - CRLT.20

HIGHLIGHTS AND TECHNICAL INFORMATION

Traditional. Innovative. SOLUTONS.

funkwerk)))

The future Cab Radio generations can be based on a packet oriented data transmission system, using commercial networks and its derivatives. Based on its long years of experience, Funkwerk has developed a LTE based Cab Radio system.

The **CRLT.20** Cab Radio is fitted into a standard double DIN housing and 2G/3G/4G providing telephony and data services. It operates on an Android based system. Due to the implementation of this market leading operating system, the usage of this device is nearly self-explanatory. The **CRTL.20** is designed for use in Rail vehicles. It provides regular 2G/3G/4G telephony services incl. VoLTE[1] and IP-based data-services. It can be operated using public available SIM cards and is an all-in-one unit for fixed installation in vehicles. Besides the interfaces for the 2G/3G/4G networks, further interfaces such as Gigabit Ethernet, WIFI, Bluetooth[2] as well as a handset, loudspeaker and a generic I/O connection are available. The installation of 3rd party applications is possible and therefore it can be smoothly integrated into an existing or new infrastructure of systems, based on Android applications

[1] network dependent; [2] optional

HIGHLIGHTS

▶ Very small packaging

▶ All-in-one -unit

▶ User interface reflects proven procedures

▶ Alternative GUI's possible

▶ Hardkeys for critical functions

▶ Connection of handset and loudspeaker in cabin required

▶ Installation of 3rd party applications possible

TECHNICAL DATA

DIMENSIONS & WEIGHT

CONSTRUCTION	compact closed housing
HEIGHT	100 mm
WIDTH	180 mm
DEPTH	72,3 mm
WEIGHT	max. 3 kg

POWER SUPPLY

NOMINAL VOLTAGE	12 V / 24 V / 36 V
INPUT NOMINAL VOLTAGE	8.4 bis 41 VDC
INTERRUPTION OF VOLTAGE SUPPLY	S1 (no interruption) according to EN 50155
MAX. POWER CONSUMPTION	25 W

ENVIRONMENTAL CONDITIONS

DEGREE OF PROTECTION	Front side IP54 / housing IP20 acc. to EN 50155
VIBRATION AND SHOCK	according to 50155 and EN 60068-2-6
EMC	according to EN 50121-3-2 and EN 50155

FREQUENCY BANDS

LTE FDD	B1/B3/B5/B7/B8/B20
LTE TDD	B38/B40/B41
WCDMA	B1/B5/B8
GSM	B3/B8

CLIMATIC CONDITIONS

OPERATING TEMPERATURE	-20 °C to +70 °C
STORAGE TEMPERATURE	-30 °C to +70 °C
RELATIVE HUMIDITY	according to EN 50155
ALTITUDE AND PRESSURE FLUCTUATION	-100 m to 1.800 m above sea level
VIBRATION / SHOCK	according to DIN EN 61373
DEVICE SECURITY	according to DIN EN 60950-1

INTERFACES

POWER SUPPLY	Multi-purpose digital I/O
HANDSET, LOUDSPEAKER	4 x antenna (2G/3G/4G + GPS+WIFI/BT)
WLAN 820.11 A/B/G/N	Gigabit Ethernet (Standard IEEE 802.3ab 1000BASE-Tx)
BLUETOOTH 4.1	GPS, GLONASS, BeiDou, Galileo and QZSS
SIM CARD	SD Extended Capacity (SDXC™)
USB 2.0	

PROCESSOR

I.MX QUAD CORE WITH CORTEX®-A9 CORES

OPERATING UNIT

TYP	capacitive touch
NOMINAL SIZE	5"
DISPLAY RESOLUTION	800 x 480 pixels

OPERATING SYSTEM

ANDROID / LINUX AVAILABLE AS OS	Android 8 based
FUNKWERK SOFTWARE	

APPROVAL NUMBER

E1*10R05/01*8803*00 (FEDERAL MOTOR TRANSPORT AUTHORITY)

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