



KAREL TAG102 ROIP RADIO OVER IP GATEWAY

THE NEW GENERATION MILITARY TAG102-ROIP (RADIO-OVER-IP) INTERFACE DEVICE IS DEVELOPED WITH WATERPROOF AND RUGGEDIZED BODY TO MEET THE HARSH TACTICAL ENVIRONMENT. TAG102 CONVERTS THE CONNECTED RADIOS INTO ETHERNET / IP DATA AND TRANSMITS IT TO IP NETWORKS VIA IP PORTS. THANKS THAT IT PROVIDES THE COMMUNICATION OF SATELLITE OR ETHERNET NETWORKS WITH ANALOG RADIO CONNECTIONS AND SUPPLEMENTARY ELEMENT FOR TACTICAL FIELD IP COMMUNICATION. EXCEPT RADIO COMMUNICATION CONNECTION IT HAS ALSO THE ANALOG /IP NETWORK CAPACITY FOR CONNECTING 14 UNITS FXS SUBSCRIBES.

TECHNICAL SPECIFICATION OF THE SYSTEM

Functional Properties

- Ability to control all device parameters via SNMP and web
- All device parameters can be managed via web.
- Supports IPV4 and IPV6.
- Equipped with 14 units FXS analog audio interface.
- Supports 4 units radio interface
- Supports on radio connection interface balance and unbalance connection types and various impedances.
- Push-to-talk over IP networks.
- Activation options of VOX and MF for PTT.T
- The device is structured with the ability to connect to an analog phone, a secure phone MILSEC-1A and secure/ insecure fax machine.
- The device is equipped with 2 (two) Ethernet interfaces, one for data (mover interface) and one for management. The Ethernet interface supports 10/100 Mbit.

- The ports installed on the device can be independently configure and manage
- Interface of the device for control and monitoring enables to select the language mode Turkish or English.
- The device's audio interfaces support audio codex such as G.711, G.723 and G.729. Has the ability to work audio codex in compatibility with the Audio Server and other Gateway devices.
- The analog audio interface of the device operates in compatibility with the encrypted audio communication device MILSEC-1A.
- The device has a self-test function (CIT tests) to detect malfunctions and control the unit functions.

Electrical Properties

- The device operates with the supply voltages of 90-250 VAC 47-63 Hz and 20-36 VDC.
- The maximum power consumption of the Gateway device is 50 watts.

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- The quality of the communication line is 1 E-7 BER, the latency of the satellite communication is 600 ms (1200 ms roundtrip) and structured to prevent interruption of communication in jitter / wander conditions.

Interface Properties

- The ISDN PRI interface installed on the device supports the Q.931 and Q.SIG marking protocol.
- Ability to connect to the interface of the remote device command via a standard web browser (regardless of the processor and its version).

Mechanical Properties

- The device is 1U high
- The device can be install on the cab 19 " rack.

Environmental Conditions	Standard	Remarks
Storage Temperature	MIL-STD-810G	In accordance with the high and low temperature test methods available in Method of MIL-STD-810G standard Method 501.5 Procedure I and Method 502.5 Procedure I, it provides (-40) °C - (+70) °C high and low temperature storage requirements.
Operating Temperature	MIL-STD-810G	In accordance with the high and low temperature test methods available in MIL-STD-810G Method 501.5 Procedure II and Method 502.5 Procedure II it provides (-30) °C - (+55) °C high and low temperature operating requirements
Temperature Shock	MIL-STD-810G	It provides instant temperature variations requirement in accordance with MIL-STD-810G Method 503.5 Procedure I-B
Humidity	MIL-STD-810G	In accordance with the humidity test method in MIL-STD-810G Method 507.5 Procedure II (Aggravated) it provides 95% (ninety-five) humidity requirement at room temperature.
Vibration	MIL-STD-810G	It provides the vibration requirement in MIL-STD-810G Method 514.6 Procedure I (transport and operating conditions for vessels and land vehicles) and Method 528 to Procedure I and II (ship vibration)
Shock	MIL-STD-810G MIL-S-901D	It provides the shock requirement in accordance with MIL-STD-810G Method 516.6 Procedure I (for vessels and land vehicles) and MIL-S-901D (Shock Grade: B, Equipment class: II, Shock Type Test: Type A, Test Category: Lightweight Shock). (Functional Test for Ground Equipment, 40 g/15-23 ms)
Altitude/Low Pressure	MIL-STD-810G	It provides operation requirements of 3000 (three thousand) m and storage requirements of 4500 (four thousand five hundred) m in accordance with low pressure (altitude) testing in MIL-STD-810G standard Method 500.5 Process I and II
EMI/EMC	MIL-STD-461F	It is compatible with the requirements of MIL-STD-461F CE101, CE102, CS101, CS106, CS114, CS115, CS116, RE101, RE102, RS101, RS103
Acoustic	MIL-STD-1472G	It does not generate more than 65 dB (A) of noise in accordance with MIL-STD-1472G.
Rain	MIL-STD-810G	It provides waterproofness according to Method 506.5 Procedure I.
Dust	MIL-STD-810G	In accordance with Method 510.5 Procedure I and Procedure II, it meets the Dust requirement

