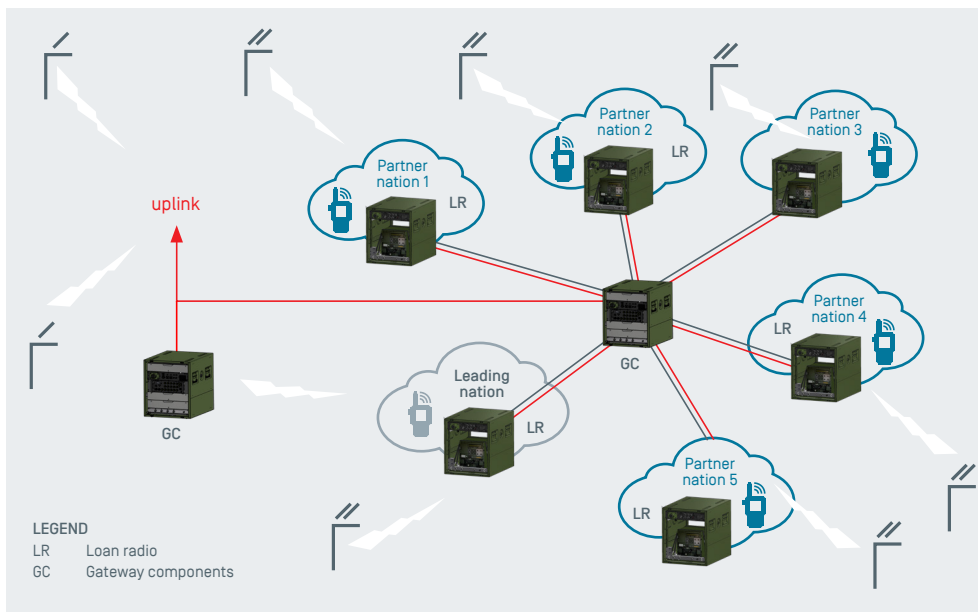RUAG TACTICAL COMMUNICATION PLATFORM

RUAG MIFAP – Multinational Interoperable Radio Connection Point

↗ The RUAG Tactical Communication Platform can be used flexibly in mission-critical situations. It guarantees maximum interoperability and reliably networks for a wide variety of organizations, systems and devices.

RUAG MIFAP is a high-performance communication hub for connecting a wide range of radio devices. Its core element is the RUAG TAN-T230A (Tactical Access Node). Audio and data signals from up to six transmission systems can be connected to it.

LEGEND
LR   Loan radio
GC   Gateway components

↗ ENSURING COMMAND CAPABILITIES DURING OPERATIONS
In order to ensure command capabilities during operations, RUAG MIFAP is operated as an autonomous connecting node that interoperably connects transmission networks and devices of different manufacturers and procurement generations [bridge function] as a universal voice and IP router. The supplied operating terminal allows up to six radio groups to be configured and operated. This enables seamless communication between proprietary military radio systems as well as civil radio systems and organizations.

MIFAP SYSTEM COMPONENTS

The MIFAP system essentially consists of three main components and accessories:
1. Transport box with power supply, TAN gateway and operating terminal
2. Transport box with power supply and installation space for any radio device
3. Wide area antenna system with mast
4. Accessories: Cable harnesses for connecting the radio systems

↗ TAN GATEWAY UNIT GC (GC = gateway component)

The TAN gateway GC is the central communication point of the overall system. It includes the gateway for routing voice and IP data, as well as the communication control system.

↗ RUAG TAN-T230A (3 RU / rack unit / 1 RU = 44.45 mm)
10 × Ethernet 10/100/1000 base-T interfaces for IP data and VoIP radio, local networks, operating/configuration device
6 × radio analog terminal adapter interfaces for analog radio devices, incl. PTT, COR, audio input, audio output, completely separate ground for each signal
1 × SFP/SFP+ IP interface for local network or WAN

↗ RUAG TPS T230 (2 RU)
1 × 230 V AC 4P Binder input
1 × 24 V DC NATO VG 96917 input
1 × 24 V DC/5A output
1 × 24 V DC/25A output

↗ OPERATING DEVICE
Tablet computer, removable
"Radio Operator Console" operator software for RUAG TAN Radio Bridge

Transport container:
12 RU/610 mm deep
3 × 19" drawer every 2 RU
Weight: approx. 63 kg

↗ LR RADIO UNIT (LR = loan radio)

In addition to a power supply for radio devices, the LR radio unit provides a carrier plate for holding and mounting radio devices. The carrier plate is designed so that the base plate of the radio device used does not need to be modified for installation.

↗ RUAG TPS T230 (2 RU)
1 × 230 V AC 4P Binder input
1 × 24 V DC NATO VG 96917 input
1 × 24 V DC/5A output
1 × 24 V DC/25A output
1 × 24 V radio device connection terminal 25A

↗ GROUND TERMINAL
2 × N to N EMP HF overvoltage protection
(provides overvoltage protection for radio devices)

↗ 1 RU CARRIER PLATE / SPACE FOR 9 RU RADIO DEVICE

Transport container:
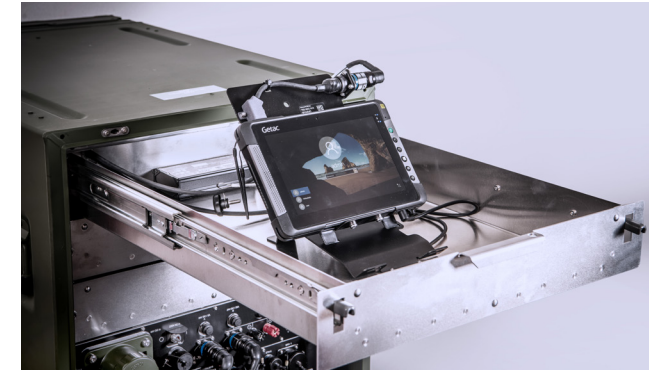12 RU/610 mm deep
Weight: approx. 47 kg

↗ COMROD ANTENNA SYSTEM

– tactical dual-band antenna VHF302000TRI/DB-2
– AMX85S mast

The antenna system consists of a tactical 2-port, dual-band antenna with an 8.5 m long mast and coaxial cables. The 10 m cable is connected to a ground stake and connected to the radio device with the 20 m cable.

↗ CABLE HARNESSES FOR CONNECTING THE RADIO SYSTEMS

– connector cable for data communication (IP)
– 10 m extension cord, for the analog RATA radio device connector cable
– 10 m extension cord, for the digital Ethernet radio device connector cable
– 10 m Ethernet cable, for the GC for integration into a local network
– 230 V power cord
– 10 m Ethernet cable, for remote operation of the operating device

RADIO OPERATOR CONSOLE

The MIFAP system works with the preset links and conference rooms without the need for further action. However, direct operation in the field is always possible via the ROC. The ROC tablet can be removed and connected to the MIFAP TAN via a 2.5 m long cable.

OPTION: UPS FROM THE COMPANY AXSOL

To ensure network-independent operation, we recommend the ARVEY B2 from the company AXSOL.

↗ AC OUTPUT

Continuous output:	2,400 W / 3,000 VA
Peak power:	3,600 W (10 s)
	4,800 W (5 s)
Frequency:	50 Hz
Waveform:	Pure sinusoidal shape
Voltage:	230 V AC ± 5%

↗ BATTERY

Capacity:	2,400 Wh
Electrical charge:	50 Ah
Nominal voltage:	48 V
Technology:	LiFePO4 (lithium iron phosphate)

INTEGRATED RADIO DEVICES

radio device type	analog	digital
Rohde & Schwarz SDTR VR5000	✓	✓
Thales SEM93	✓	–
ELBIT E-Lynx PNR-1000	✓	✓
Harris PRC-117G	✓	✓
ITT/Harris RT-1523	✓	✓
Telefunken Racoms HRM7400	✓	–
Thales PR4G Fastnet TRC 9310	✓	✓
Thales PRC-148 MBITR/JEM	✓	✓
Kongsberg MV600	✓	✓
Motorola MTM-800 TETRA radio	✓	–
TETRAPOL: BER4M with CCP operating device	✓	–
Thales SOTAS IP	✓	–
ATM KommServerBw	–	✓

↗ Animation
RUAG Tactical
Communication Solutions

08.23