

#### RUAG TACTICAL COMMUNICATION PLATFORM

# Tactical Vehicle Switch - TVS

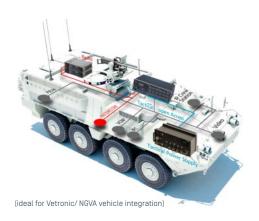


▶ RUAG TVSs are tactical communication switches that
perform multiple functions at the same time in practical
military communication scenarios. They allow reliable voice and
data communication between strategic, public and available
networks. Interoperability and non-hierarchical networking
guarantee effective communication at every level.

#### **DESCRIPTION**

Effective, fast and reliable communication at every level: From "command and control" at the division and corps level to direct communication at the platoon or section level.

RUAG TVS tactical switches are a group of hardened de-vices that are primarily used in vehicles with limited space as well as in stationary or mobile command posts. They ensure effective communication by troops on the battle-field and are therefore essential within the combat zone. RUAG's tactical communication equipment has been suc-cessfully tested and used in military operations by numer-ous European defense forces. It has proven its effective-ness in mobile voice and data communication and its interoperability in real military operations. One of its key advantages is its compatibility with existing communication equipment, and even with older genera-tions, allowing step-by-step replacement while still guaran-teeing seamless communication.



The RUAG ARANEA software core also includes network management tools that are based on recognized stand-ards and guarantee seamless integration into existing systems. In particular, different communication environ-ments can easily and rapidly be configured and operated directly on site, which is a significant advantage when changing personnel.

## HARDWARE SPECIFICATION

## **↗** L2+ MANAGED ETHERNET SWITCH

Managed Gbps Ethernet Switch with Power-over-Ethernet [PoE] – IEEE 802.1d, IEEE 802.1w, IEEE 802.1s, and IEEE 802.1X

10/100/1000 Mbps		
Jumbo frame support at all speeds		
IEEE 802.1Q with 8K MACs and 4K VLANs, GARP/GVRP		
IPv4 and IPv6 multicast group support		
8 priorities and 8 QoS queues per port		
Rapid Spanning Tree Protocol (RSTP) and MSTP		
Flexible link aggregation support based on Layer-2 through Layer-4 information (IEEE 802.3ad)		
IEEE 802.3af and IEEE 802.3at		

## → ARANEA SOFTWARE CORE OPTIONS

L3 Protocols	OSPF, PIM-SM, DHCP, DNS, NTP, ACL, ARP, ICMP IPSec, DiffServ	
Tactical Routing	IGMP Proxying (RFC 4605), tactical mesh algorithms for disconnected, intermittent, low- bandwidth (DIL) networks (unicast & multicast)	
Vehicle Voice Integration	Management of intercom, telephony and radio voice streams	
Tactical Telephony (TTEL)	Distributed telephony solution for tactical networks radio-over-IP (RoIP), radio bridge & conference.	
Messaging (TMSG)	Distributed messaging solution for tactical networks	

## → MANAGEMENT

EMC

S NMP v1/v2c/v3, CLI, Web GUI, XMLRPC API for remote man-agement, Syslog, configuration profiles (up/download), inte-grated Built In Test, status LED indicators

→ DISPLAY		
Display Color	Monochrom	
Resolution	128 x 64 Pixel	
→ MECHANICA	AL DATA	
Size	279 × 215 × 85 mm (L×D×H)	
Weight	4 kg	
Color	Black or different color on request available	
<b>→</b> POWER		
Power Supply	nach MIL-STD-1275E	
Input voltage	18-60 VDC	
Power	40 W plus PoE- Leistungsabgabe	
→ ENVIRONME	NTAL CONDITIONS	
Temperature	-40+70°C in storage -40+55°C in operation	
Waterproof	MIL-STD-810E, 506.3, procedure II	
Relative humidity	95% RH, MIL-STD-810E, 507.3, procedure I, cycle 3	
Functional shock	MIL-STD-810F, method 516.5, procedure I, impulse [30 g, 11 ms, sawtooth wave]	
Vibration	MIL-STD-810F, method 514.4-4 (1 – 6.5 g RMS, 5 – 500 Hz)	

MIL-STD 461E, IEC 61000-4-2, IEC 61000-4-4, IEC

61000-6-2

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		060C
Electrical Ethernet	10/100/1000 Base-T	4
	10/100/1000 Base-T with PoE [PoE 802.3af/at max. 100W]	8
Radio Analog Terminal Adapter	Audio, PTT, COR/Squelch, serial interfaces	4
USB	USB 2.0	2
Service	1 × 1000 Base-T, 1 × USB, 1 × VGA	yes
Optional features on request:		
CAN	Vehicle CAN bus (manufacturer specific)	-
RS-485 / RS-232	Serial Interfaces	-