

RR 4702 - High Capacity LOS Radio Relay

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Main features:

- ✓ HCLOS PTP radio relay with transmission capacity up to 320 Mbps
- ✓ Harmonized frequency band 4,4 – 5 GHz (NATO IV)
- ✓ High output power and long distance up to 90 km
- ✓ Channel bandwidth 7 MHz ÷ 56 Mhz
- ✓ Modulation QPSK ÷ 256 QAM
- ✓ Gigabit ethernet and E1

RR4702 High Capacity Line of Sight (HCLOS) Point to Point (PTP) radio relay based on software configuration core for building of higher organizational levels in mobile tactical networks in NATO IV frequency band. Time continuous full duplex transmission capacity up to 320 Mbps is ensured by Frequency Division Duplex (FDD). Ethernet 10/100/1000 BASE-T and E1 (2048 kbps) are standard interfaces. Local control is over PC and IP management is over webserver or SNMP.



Indoor Unit



Outdoor unit

RR4702 is very universal due to wide range of easy software setup parameters (channel bandwidth 7 MHz ÷ 56 MHz and modulation QPSK ÷ 256 QAM). It can be configured to high capacity data transport in backbone net (12 - 15 km) as well as to long distance connection (60-90km) with high robustness and lower data rate. Robustness algorithms APC, ACM and FEC are included. Radio meets strict conditions for EMC and mechanical ruggedness – it is designed for extreme climatic conditions.

Technical specifications

General

Frequency range	4400 ÷ 5000 MHz
Duplex spacing	312 MHz
Modulation	QPSK to 256 QAM or ACM (promptly SW setup)
Channel separation	7, 14, 28, 40, 56 MHz (promptly SW setup)
Max. aggregate transmission rate	cca 320 Mbps (full duplex)
Forward error correction	LDPC
1x ETH 10/100/1000 Base-T	up to 320Mbps (IEEE 802.3u, 802.3x, 802.3ac)
1x E1, G.703	2,048 Mbps (optionally more ports)

Transmitter

Output power	33 dBm (QPSK), 28 dBm (256 QAM)
Communication control (ATPC or manual)	40 dB
Manual control step	1 dB
Intermediate frequency	350 MHz

Receiver

Receiver threshold (10e-3 BER)	-85 dBm (QPSK), -67 dBm (256 QAM)
Max. level of input signal	0 dBm
Intermediate frequency	140 MHz

Management

Local management	PC (USB) – PC application
IP management	2x 10/100 Base-T (separate channel) - SNMP v.2/3, HTTP
EOW	32 kbps (servis full duplex call)

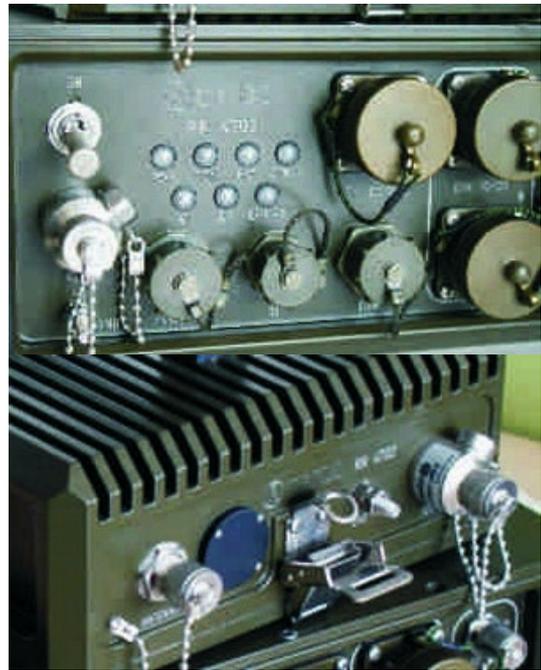
Power supply, Dimensions, Weight , Environmental conditions

Power supply	18 - 30 V
Consumption	< 60W

	Indoor Unit (IDU)	Outdoor Unit (ODU)
Dimensions (W x H x D)	288 x 128 x 303 mm	224 x 135 x 310 mm
Weight	< 8 kg	< 7 kg
Operating temperature range	-33°C to +50°C	-33°C to +50°C
Humidity	100 % (waterproof)	100 % (waterproof)

Accessories

Antenna FPA 26 dBi, 6°	H or V turn 90°, 600x600x24mm, 5 kg, green or tan
Fixture of antenna and ODU	diameter 40 mm, elevation +-25°
Hand-microtelephone	with PTT
IDU-ODU cable	100 m (optionally other length up to 300m)
ODU-Antenna cable	1,2 m
Power cable	2,5 m (optionally other length)
USB cable	1,8 m
Microtelephone extension cable	40 m (optionally other length)



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