

RMR Station™

LONGRANGERF

SUPER REPEATER

2-way communication
with NPR Server

Industrial Computer



Operation

The RMR Station™ is a Super Repeater that includes a powerful industrial computer, advanced RF receivers (up to 8 channels) and several combinations of backhaul devices (RF modem, Cellular modem, WAN).

RMR Stations are designed to receive RF end-points and older generation repeaters (SMR), and collect the data on the computer database, with practically unlimited capacity.

Data is processed, and is then compressed and encrypted for efficient and extremely fast transfer to the Central Monitoring Station (thousands of messages within seconds). Transmission media are a combination of high-speed RF modem, Cellular modem or WAN connection. Each communication medium acts as a backup to the other, ensuring maximum reliability at minimum cost. RF modem and/or WAN are typically used as the main links, and Cellular is used as backup.

Key Features

- RF, Ethernet, and Cellular links to Central Monitoring Station
- Dedicated receivers used for receive only, listening to the channel 100% of the time
- 2-way communication with NPR Server – each message acknowledged for maximum reliability
- Up to 8 channels – supporting very large number of end-points
- Full remote access and software upgrades
- Unlimited message buffer
- Outdoor or Indoor housing

High-speed
RF Modem

Up to 3 receivers

Indoor rack
mount option

Cellular / physical IP
connectivity



INDOOR
STATION



OUTDOOR
STATION

Specifications

GENERAL

Power Supply	85-265 VAC, 45-46 Hz
AC Mains, Current Consumption	2A on 220VAC supply, 4A on 110VAC supply
Backup Battery	12 VDC, 2x7 Ah Sealed or 4x7 Ah for 2 frequencies. Lead Acid (not supplied)
Operating Temp.	-30°C to 70°C (-85°F to 158°F)
Storage Temp.	-30°C to 70°C (-85°F to 158°F)

RF TRANSMITTER

Frequency	VHF: 136-174 MHz & UHF: 410-512 MHz
Modulation	FM, FSK and DFM
Power Output	1 - 25 Watt
Frequency Setting	Synthesized
Frequency Stability	±2.5 ppm
Spurious & Harmonics	+65dB
Deviation	2.2KHz for 12.5KHz bands

RF TRANSMITTER CONT.

Operating DV Volt	10.5-14.5 VDC
Standby Current Consumption	1500mA (typical with 2 transceivers)
Transmission Current	Depends on output power and number of transceivers
Output Impedance	50Ω BNC connector

RF RECEIVER

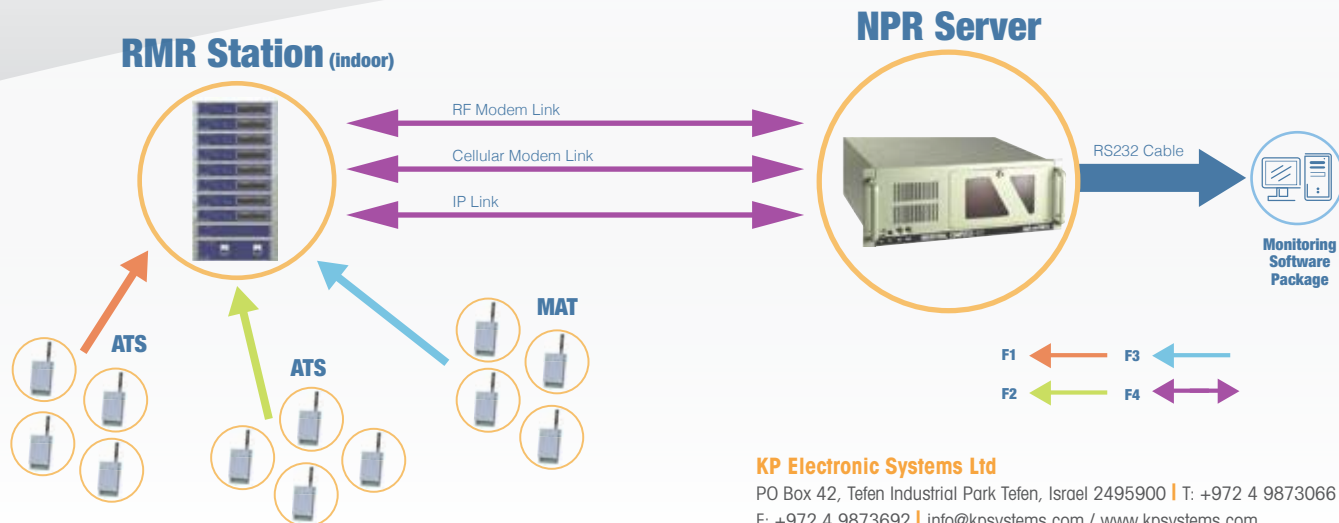
Sensitivity	0.3μ V (-116DBM) for 12dB SINAD
Selectivity	65dB at ±12.5 KHz
Min. Detectable Signal	-118 DBM for KP protocols

STANDARDS

FCC (USA) using BSR100™ BSRU100™	FCC ID: H78KPBSR; Emmission Designator: 11K0F2D
ETSI (CE) using Motorola™ - GM340™	ETSI 300 113

RMR Station™ LONGRANGERF

SUPER REPEATER



KP Electronic Systems Ltd

PO Box 42, Tefen Industrial Park Tefen, Israel 2495900 | T: +972 4 9873066 /
F: +972 4 9873692 | info@kpsystems.com / www.kpsystems.com

