



GRC-625/E

VHF Ground-Based Radio Communication System

GRC-625/E is a ground-based radio Communication system in VHF band (118~136.991 MHz) for establishing Ground-to-Air communication in air traffic control towers (ATCs).

Key Features

- SDR (Software Defined Radio)
- Modular Architecture
- Containing Efficient Built-In Tests (BIT)
- Advanced Software/Hardware Technology
- Easy Installation and Set-Up
- Containing High Resolution Display (9" TFT Display)
- Resistant to Shock, Vibration, Humidity, High Temperature and Low Temperature

General Specifications

Frequency Range.....	VHF: 118 ~ 136.975 MHz
Channel Spacing.....	25 kHz, 8.33 kHz
Number of Preset Channels.....	119
Power Supply.....	DC supply: 28 VDC AC supply: 230 VAC
Power Consumption.....	Approx. 150W (Receive Mode, DC) Approx. 450W (Transmit Mode, DC)
Radio Mode.....	AM A3E Standard
Radio Control Interface.....	RS422 10/100 Ethernet (RJ45 Connector)

Transmitting Specifications

Output Power.....	AM Carrier Power: 40W $\pm$ 1dB
AM Modulation Factor.....	At Least 80%
Modulation Distortion.....	Maximum 5%
Harmonic Suppression.....	$\geq$ 70 dBc
Non-Harmonic Spurious Suppression.....	$\geq$ 80 dBc
AF Input.....	200 mV to 600 mV RMS into 600 Ω $\pm$ 10%
AF Response.....	300 to 3400 Hz

Receiving Specifications

Receiving Sensitivity.....	AM: -103 dBm for 10 dB SINAD
Selectivity.....	Wideband: $\geq$ 60dB/ $\pm$ 25 kHz Narrowband: $\geq$ 40dB/ $\pm$ 8.33 kHz
Squelch Sensitivity.....	Setting the Squelch on/off Points in 5~25dB Output SINAD
Image Rejection.....	-80 dB
IF Rejection.....	-80 dB
Loudspeaker Output.....	2 W
Sound Recorder Output.....	700mVrms into 600 Ω
Differential AF Output.....	700mVrms into 600 Ω balanced
AF Response.....	300 to 3400Hz
Audio Distortion.....	Maximum 5%
Receiver Input Protection.....	+30 dBm Input

Physical/Environmental Specifications

Dimension of R/T Unit.....	19" Standard Rack, 3HU, 480 mm Depth
Weight of R/T Unit.....	Maximum 28 kg
Dimension of Remote Control Unit.....	100×132×202 mm
Weight of Remote Control Unit.....	Maximum 2 kg
Operating Temperature.....	-20°C ~ +55°C
EMC Standard.....	MIL-STD-461F