

# TGR Transceiver & Repeater

Field Ready High-Power Radio

Cable Connected Transceiver or Store-Forward Repeater

5, 20, 35-Watts

410 to 470 MHz range

25KHz or 12.5 KHz Channel Bandwidth

Supports common protocols:

Transparent EOT

Trimtalk™ / TT450S

Trimmark3™

32-channels, front panel selectable

Built-in Voltmeter displays battery status

Metal carry handle will not crack

Industry standard Power / IO connections

TNC-Female UHF Output Port

Ports protected from physical damage

Automatic shutdown on Low Voltage

Sold in complete kits including:

radio

antenna

antenna cable & mount

programming cable

**USB-to-Serial adapter** 

IP67, case and connectors water and dust proof

iGage Programming Tool

1-Year iGage Warranty

www.iGage.com





## **GR** High-Power 35-Watt UHF Radio Repeater Specifications

Kit Contents	Radio, Power/Data Cable, 5 dBi Antenna, cable, 5/8" mount, USB-to-Serial adapter, User Manual
Price (MSRP)	Please call iGage: +1-801-412-0011 or check: www.iGage.com for current prices
Markings:	Name iGR; Part Number HX-DU8616D
Frequency Range	410 to 470 MHz
Channel Bandwidth	12.5 / 25.0 KHz, programmable
Operation Mode	Half Duplex, Transmit, Receive, Repeat
RF Output Power	Low 5W 37 dBm, Medium 20W 43.5 dBm, High 35W 44.5 dBm; at 12 V input power
Selectable Channels	32 Tx / Rx / Bw Channels
Sensitivity	-114 dBm @ BER 10-4, 9600 bps
Over-the-Air Rates	4800, 9600, 19200 bps
Protocols	Transparent EOT, Trimtalk™, Trimmark3™, Satel™; FEC on/off; w/ CSMA
Modulation	GMSK / 4FSK
Cable Baud Rate	9600, 19200, 38400, 57600, 115200 bps
Interface	RS-232, 8 data bits, 1 stop bit
Compliance	FCC ID 2ACRAHX-DU8616D. An FCC License with Call Sign is required to operate this device.
Display	4-line OLED display, 5 buttons, 3 LEDs
Physical	Size: 175 x 130 x 86.5 mm (6.9 x 5.2 x 3.8 inches) Weight: 1.9 KG, (4 lbs. 2 oz) Operating temperature: -45°C to 65°C (-40°F to 148°F) Storage temperature: -50°C to +85°C (-58°F to 185°F) Humidity: 100% condensation Waterproof and dust proof: IP67 water-resistant to 1m for 30-minutes.
Input Voltage Range	9 to 16 volts DC
Power Consumption	At 12V Input: Standby 3W (0.25A), Low Tx 35W (2.9A), Medium Tx 65W (5.4A), High Tx 80W (6.7A)
Maximum Tx Duty Cycle	100% as cable connected transmitter, 50% as repeater
Connections	UHF Antenna: TNC Female, 50-ohm impedance; Serial Data/Power: LEMO 5 pin
Radio Configuration	iGR_Programmer tool allows programming with any Windows 7/10 PC.
Warranty	1-year iGage radio warranty; accessories 30-days

### § 15.19 Labeling requirements:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ operation.

### § 15.105 Information to the user:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the

user is encouraged to try to correct the interference by one or more of the following

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 2m between the

Antenna must be located to provide 2-meter clearance to all persons. Antenna must not be installed collocated or operating in conjunction with any other antenna or transmitter.



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