

# UHF TELEMETRY DATA TRANSCEIVER

MODEL NUMBER: RF3545TR



Superior RF Engineering Design Services

## DESCRIPTION

The RF3545TR UHF GFSK data transceiver is designed for operation in the 350 to 450 MHz frequency band providing half duplex communications at data rates up to 80 kbps. The transceiver boasts dual power RF output modes that are user selectable and can be set to either 100mW or 5 Watts.

The RF3545TR data transceiver is designed to function under command of a system control unit; that is, the transceiver requires integration with a host controller where all functions are controlled by the host system. The transceiver is utilized in embedded applications and can be the solution to a host system requiring RF communications.

Additionally, the transceiver incorporates an automatic level circuit (ALC) to hold the transceiver's transmit output power relatively constant over varying conditions such as temperature and supply voltage.

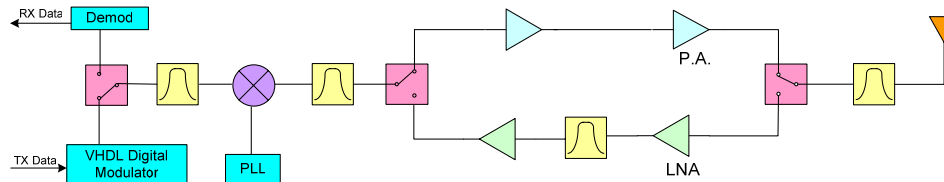
As an added benefit, the transceiver provides LED status to verify key functionality of the radio. Specifically, the status of signal present, alignment mode, transmit mode, and synthesizer frequency lock can be viewed from the indicators.

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The RF3545TR transceiver satisfies numerous requirements for commercially available off-the-shelf transceivers. NuWaves can customize this transceiver to meet your particular requirements.



### Preview of Hardware Specifications (subject to change without notice)

Frequency Range:	350 to 450 MHz	Sensitivity (BER 1E-4):	-99 dBm Typical
Temperature: Operating	-30°C to +70°C	RF Output Power:	User Selectable
Storage	-40°C to +85°C	Power Modes:	100 mW and 5 Watt
Transmit Current:	1.8 Amps Typical	Receive Current:	115mA Typical
DC Power:	+11 to +14 VDC	Dimensions:	4.35" x 5.15" x 0.75"
Data Rate:	Up to 80 kbps		

### Applications:

The unique and proprietary architecture of NuWaves' RF3545TR enables it to be applied to a broad spectrum of uses – custom designs are available (wideband or narrowband FM, size, frequency, data rate, etc.). Representative applications include:

- Telemetry Transceivers
- UAV Communication Links
- Data Communications
- Access and Activity Alerts
- Suitable for TDMA Networks
- General Purpose Short Range or Long Range Data Transceiver Communication Links
- Military Communications

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