

# HIGH AVAILABILITY BASE STATION/REPEATER

VHF, UHF, and 900 MHz



The High Availability Base Station/Repeater option is designed for today's high speed telemetry and SCADA networks requiring a level of security against system failure. Its versatile design allows for a variety of configurations:

Simplex, Half or Full Duplex Base Station Full channel 25 kHz bandwidth or half channel 12.5 kHz bandwidth operation with programmable baud rates up to 19200 bps in a 25 kHz channel and 9600 bps in a 12.5 kHz channel.

## REDUNDANCY

Each unit has two independent transmitters, and receivers that are identified as Side A (primary) and Side B (secondary). The central controller module will select Side A or Side B dependent on various operating criteria.

## SCADA SYSTEM CONTROL POINT

The High Availability Base Station/Repeater option monitors and reports receiver, transmitter or power supply failures. If a failure is detected, the controller can automatically switch to the back up component. The system notifies the operator with an audible, visual, or contact closure alarm. Mission critical information is received without loss and equipment faults can be identified and repaired.

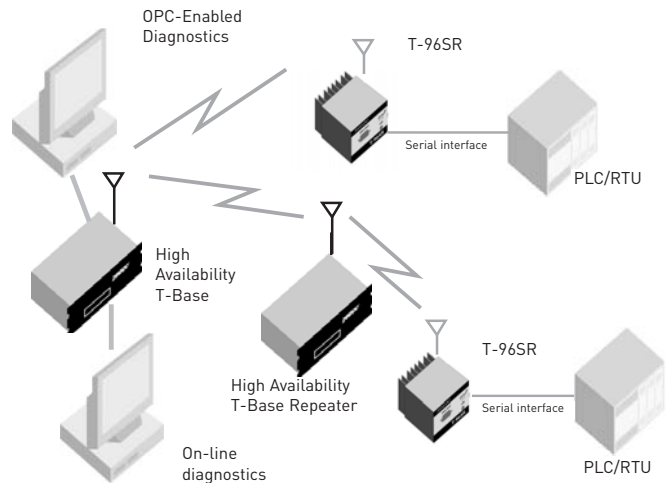
Using the High Availability Base Station/Repeater option in conjunction with network diagnostics maximizes data network integrity while minimizing system downtime.

## SYSTEM STATUS INDICATORS

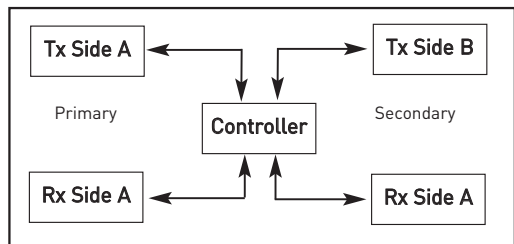
Visual indicators on the controller front panel indicate the active RF component (A or B) and any alarm conditions. Audible alarms are also available with the High Availability option.

## RUGGED DESIGN

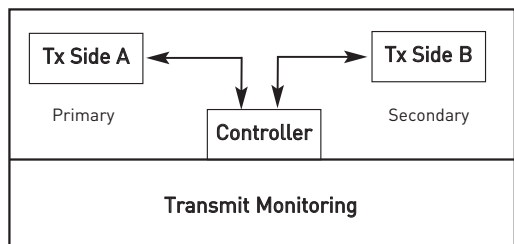
The High Availability Base Station/Repeater option mounts in a standard 19" rack. Dataradio parts are covered by our standard two-year warranty with one-year warranty on labor. Third party components are covered by their respective manufacturer's warranty.



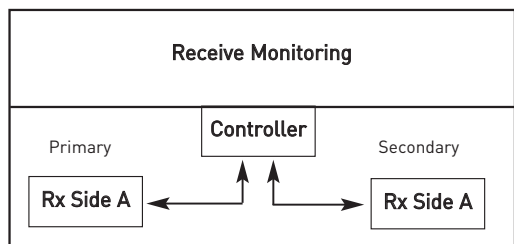
**HIGH AVAILABILITY BASE/REPEATER OPTION**



Base station normal operation is in the auto mode. The controller selects side A or B as active, dependent on operating criteria. Input from the RF components are monitored by the controller and evaluated against the operating parameters. Should a component input be outside the operating parameters, the controller will initiate a switch to the stand-by component and activate an alarm.



The active transmitter is monitored for forward and reverse RF power and a transmitter lock condition. Detection of failure in any of these areas will generate an alarm and the controller will switch to the alternate transmitter. Periodically, the controller will initiate a switch to the other bank to verify its full functionality. The controller monitors the data control and carrier detect lines to ensure no activity at the time of the switch.



All wireless modem components are continuously powered. This allows the controller to monitor the integrity of both receivers (the active and stand-by) continually, using RSSI levels. When the controller determines a significant difference in RSSI, it will switch to the better receiver. If the failed receiver is the stand-by receiver, no switch takes place and an alarm is generated.

For technical specifications on Base Station/Repeater, see the product brochure and technical manual for the respective wireless modem (T-96SR, Integra-TR, or Integra-H).