

TRXS-840-2 Bracelet Transmitter Operational Description

The TRXS-840-2 is a small ankle worn device designed for offender monitoring applications..

The device comprises a printed circuit board (PCB) that includes a RF transceiver module with an integral antenna and a microcontroller that controls its operation.

The TRXS-840-2 has one 433.92MHz RF channel over which it transmit to electronic monitoring receiver.

The unit is powered by an internal 3.6V Lithium Thionyl Chloride battery.

The TRXS-840-2 is attached to the ankle of the offender by means of electrical strap.

When activated, the TRXS-840-2 transmits signals separated by a pseudorandom interval of between 18 and 22 seconds. any interruption in the reception of the transmitted signal (which might indicate an escaped offender) may put public life at risk – the central monitoring system sends an immediate alert to the probation officer or to the sheriff in-charge, who should take immediate action to ensure public safety.

As per section 15.231(a)(3), being a security and safety of life equipment this device transmits supervision transmissions, including data (e.g. battery ok, strap not cut, etc), to determine the device integrity. The total duration of transmissions does not exceed more than two seconds per hour: 60 minutes X 3 transmissions per minute X 9.5 mSec (max.) = 1.71 seconds.