

Screamer MIU-50 Description

The Screamer meter interface unit (MIU) is a direct sequence spread spectrum transmitter operating in the unlicensed 902-928 MHz band. The transmitter delivers 50 mW of RF power into a printed antenna.

The transmitter has two interface ports for connections to two utility meters. The microprocessor on the transmitter board accumulates pulses from the two meter ports and transmits the pulse counts, along with a unique I.D. in a 13 mS burst. The interval between bursts is programmable. Typical operation would require transmission intervals between 1 per hour and one per 8 hours.

In addition to pulse counts and a unique I.D., the transmitter sends a vendor code, a property code, and a status byte. The status byte indicates repeat level, battery status, and tamper for each meter.

The data is spread using a 63 bit PN code, providing 18 dB of processing gain.