



Safe Environment Engineering

Life-Line Dongle

The Lifeline Dongle is a simple wireless WiFi compliant tool that enables remote live viewing of the information gathered from many existing and different meters (instruments) and sensors. The Dongle interfaces with radiological, chemical, physiological, and other meter/sensor categories.

A Lifeline Dongle is attached to the meter/sensor. The information is then wirelessly relayed to a Lifeline Meter application located in a safe location away from a potential hazard.

The Dongle is a small rugged sealed enclosure capable of transmitting meter/sensor readings once per second for at least 4 hours using 3 AA batteries.



Specifications

Technology: IEEE 802.11b/g, WiFi compliant

Frequency:

2.4 ~ 2.4835 GHz (US/Can/Europe)

2.471 ~ 2.497 GHz (Japan)

Modulation Technology: DSSS, CCK, OFDM

Modulation Type: DBPSK, DQPSK, CCK,
BPSK, QPSK, 16QAM, 64QAM

Network Access Modes: Ad-hoc, infrastructure

Channels:

11 channels - USA/Canada

13 channels - Europe

14 channels - Japan

4 channels - France

Data Rate:

802.11b rate: 11, 5.5, 2, 1 Mbps

802.11b/g rate: 54, 48, 36, 24, 18, 12, 9, 6 Mbps

MAC: CSMA/CA with ACK, RTS, CTS

Data Transfer: TCP/IP, HTTP, UDP

Range:

150 feet/45 Meters Max indoor

300 feet/90 Meters Max outdoors

Connector/Connection:

RS-232

TTL

IrDA

4-20 ma

Ethernet

Contact Closure

Sensitivity:

-71 dBm for 54Mbps

-77 dBm for 36Mbps

-83 dBm for 18Mbps

-85 dBm for 11Mbps

-87 dBm for 1Mbps

Security: WEP 64 & 128 bit (RC4),
WPA (TKIP), 802.11x (LEAP)

Antenna: Two U.FL coaxial connectors, 50 ohms

Supply: 3.3 VDC +/-5%

Current Consumption:

575mA - transit mode (typical)

375mA - receive mode (typical)

Power Up Inrush Current: 3000 mA (max) 20ms

Operating Temperature: -40°C - +85°C

Serial Interface Data Throughput: UART up to 460k Baud

Analog Inputs: Up to 8 channels, 10 bit resolution

Agency Approvals: FCC Part 15 Class B Sub C Intentional

CE ETSI EN300 328, EN301 489, ETSI 60950-1

IC RSS210

RoHS and WEEE compliant

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