ProFLEX01

2.4 GHz Transceiver Module Supports 802.15.4, 6LoWPAN and ZigBee®



SIMPLE ProFLEX01 NETWORK PROTOCOL:

- Star networks
- Serial communication API (UART)
- FLEXConnect[™] simple repeating & source routing

EACH ProFLEX01 MODULE IS SUPPORTED BY THE FOLLOWING HARDWARE:

- Mini Gateway Ethernet
- Mini Gateway USB
- · Development board
- Shield for Arduino[®]



ProFLEX01 KEY FEATURES

- 2.4 GHz DSSS transceiver
- Supports 802.15.4 / ZigBee / 6LoWPAN
- Versatile, ultra low power MSP430 microcontroller platform
- 100 mW RF output power
- -99 dBm RF receive sensitivity
- 2.2 V to 3.3 V operation
- Power consumption:

145 mA in transmit

30 mA in receive

3 uA in sleep

- 256 kB Flash and 16 kB RAM
- FCC and IC certified
- ETSI compliant
- AES encryption
- Supports Smart Energy Profile and interoperability with ZigBee Pro devices
- Open hardware platform to enable userdeveloped application code
- Multiple certified antenna options, including PCB antenna and U.FL connector for external antenna
- Operating temperature: -40 to 85° C

ALSO FROM LS RESEARCH

- Pre-certified antennas
- Custom antenna design services
- Full turnkey product development
- EMC certification and testing

Additional LS Research Information & Support

LSR Homepage RF Modules

www.lsr.com/products

EMC Certification Support Forum www.lsr.com/certification_center http://forum.lsr.com

Product Development TiWi™ Wiki www.lsr.com/design_services http://wiki.lsr.com

Ordering Information

Part Number	Description
450-0011	ProFLEX01 F Antenna Module
450-0012	ProFLEX01 u.fl Module
450-0023	ProFLEX01 F Antenna Development Kit
450-0058	ProFLEX01 Shield for Arduino with F Antenna
450-0004	ProFLEX01-R2 F Antenna Development Kit
450-0075	ProFLEX01-R2 F Antenna Module
450-0076	ProFLEX01-R2 u.fl Module
001-0001	2.4 GHz Dipole Antenna
080-0001	u.fl to SMA Bulkhead cable

LS Research Authorized Distributors

Americas EMEA and Israel

Arrow Electronics Arrow Electronics

www.arrow.com/business-with-arrow.emeasa.html

Avnet Electronics Marketing Digi-Key Corporation www.avnetexpress.com www.digikey.com

Digi-Key Corporation EBV Elektronik www.digikey.com www.ebv.com

Mouser Electronics Mouser Electronics www.mouser.com www.mouser.com

Silica

www.silica.com

Telsys

www.telsys.co.il



