

Operational Description of AMB2520-RSL

The AMB2520-RSL is a compact and low-cost radio data transmission module for wireless half-duplex communication. The integrated microprocessor controls data communication, handling packet and checksum formation, addressing, monitoring of channel access and resending unreceived packets. The host system does not have to perform any radio-specific tasks. The module can be configured in many ways and supports data transfer with fast channel and address switching. Measured field strength (RSSI value) offers the option of enhancing quality of the radio link. The GUI for the freely available Windows application AMBER-ACC makes it easy to set operating parameters. A USB adapter is available to easily connect the AMB2520-RSL to any PC system or data terminal.

The AMB2520-RSL is constructed on an SMD design and suitable for automatic component mounting. It can also be delivered in tape and reel packaging.

Interfaces

The AMB2520-RSL is connected to a host system via the UART interface with bit rates of up to 115.2 kbaud. Other pins can be used for data flow control and to switch between operating modes. An SPI interface is included. Using appropriate firmware, the module is also suitable for autonomously recording digital or analogue signals.

