Lesson Title:
Reader Architecture and Antenna Configurations

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Reader Layer
 Reader Challenges

• Must transmit a continuous wave (CW) carrier to power the tag at the same time it is listening for the transmission from the tag (full-duplex)
• Must be sensitive enough to receive very small signals from tag (sensitivity)
• Must detect tag in the presence of other interfering signals like other readers (selectivity)
• If operating in the ISM band, it typically has to frequency hop quickly

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Bistatic configuration

- One antenna is used for transmitting and a different antenna is used for receiving.
Monostatic configuration

- The same antenna is used for both transmitting and receiving
Form Factors

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