

RFID Readers

What is an agile reader?

An agile reader is one that can read tags operating at different frequencies or using different methods of communication between the tags and readers.'



What is reader collision?

One problem encountered with RFID is that the signal from one reader can interfere with the signal from another where coverage overlaps. This is called reader collision. One way to avoid the problem is to use a technique called time division multiple access, or TDMA. In simple terms, the readers are instructed to read at different times, rather than both trying to read at the same time. This ensures that they don't interfere with each other. But it also means any RFID tag in an area where two readers overlap will be read twice. So the system has to be set up so that if one reader reads a tag, another reader does not read it again.

What is "dense reader" mode?

This is a mode of operation that prevents readers from interfering with one another when many are used in close proximity to one another. Readers hop between channels within a certain frequency spectrum (in the United States, they can hop between 902 MHz and 928 MHz) and may be required to listen for a signal before using a channel. If they "hear" another reader using that channel, they go to another channel to avoid interfering with the reader on that channel.