

OPERATING DESCRIPTION of STARGATE™ RF910MHz BASE STATION

STARGATE™ is a Radio Base Station that enables a 910 MHz wireless network allowing data transmission between several Datalogic RF devices and an host system (standard PC, Windows based).

The media access protocol used to manage the shared RF channel is called Carrier Sense Multiple Access Collision Avoidance (CSMA/CA). The CSMA/CA protocol manages the data transmission between STARGATE™ and the radio device. Once the sequences are received by STARGATE™, the base station stores them in its internal memory until they are requested by the PC.

STARGATE™ allowed to build point-to-point configuration (in RS232 connection) or multipoint configuration (in RS485 network connection with roaming).

STARGATE™ can be connected to the PC through an RS232 or an RS485 line. If the required coverage area is supplied by a single STARGATE™, it is possible to connect it to a PC through an RS232 interface (default connection). The hardware system is composed by a PC, one STARGATE™, a serial cable, a power supply connected to the base station and a given number of RF devices.

Several STARGATE™ base stations can be chained together in an RS485 network can be connected. The 485 network is connected to the PC through a commercial RS232/485 converter.