

### **3 FUNCTIONAL DESCRIPTION**

The Orion 5825–SR, referred to as the radio in the document, consists of an Outdoor Unit (Orion 5850) and antenna.

#### **Orion 5850 outdoor unit**

The OU is a configurable RF transceiver for which different transmission parameters can be selected depending on data throughput and transmission distance requirements.

The OU operates as a full duplex transceiver that runs in continuous transmission mode. Thus, a set of OUs provides a fixed rate full duplex data path. This full duplex path between OUs is maintained at all times and can be utilized according to their data transfer requirements. This implies that the transmitted RF spectrum for a given OU configuration is independent of the type or volume of data received. When no user data is available for transmission over the RF link, the OU modulator will transmit “dummy” data over the link, thereby preventing transmission gaps that would influence the transmitted RF spectrum of the radio.