

2 Typical RET Antenna System

About This Chapter

The typical RET antenna system is an independent antenna system that does not share antennas and feeders with other systems.

[2.1 Cabinet + BT + RET Antennas + RCU + SBT](#)

In this typical configuration, the antenna system consists of the RET antenna, BT, SBT, RCU, and feeders. The AISG port on the SBT is connected to the RCU through an AISG control cable.

[2.2 Cabinet + BT + Cascaded RET Antennas + RCU + SBT](#)

In this typical configuration, the antenna system consists of the cascaded RET antenna, BT, SBT, RCU, and feeders. The AISG port on the SBT is connected to the RCU through an AISG control cable.

2.1 Cabinet + BT + RET Antennas + RCU + SBT

In this typical configuration, the antenna system consists of the RET antenna, BT, SBT, RCU, and feeders. The AISG port on the SBT is connected to the RCU through an AISG control cable.

NOTE

The common BT transmits DC signal and RF signal, and the OOK BT transmits DC signal, RF signal, and OOK signal. For the RET antenna system, the OOK BT must be used.

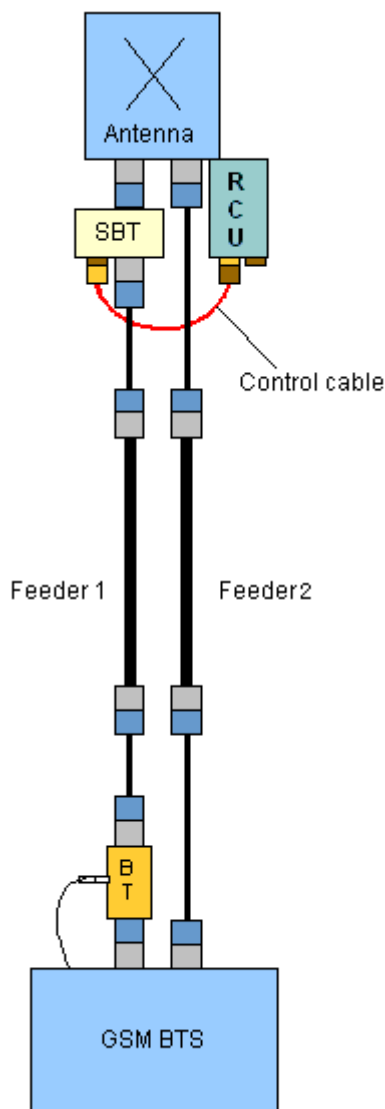
You should **install splitters** if multiple antennas are used in one sector in the case of split sectors. Splitters are installed between the base station and the antennas using jumpers.

The RET antenna can be controlled through the Huawei OMC or the LMT. The OMC or the LMT sends the control signals to the base station. The base station converts the control signals into OOK signals, and then transfers the OOK signals and DC power to the BT. Then, the BT couples the OOK signals and DC power into the internal conductor of Feeder 1.

After the OOK signals and DC power enters the SBT, the DC power is transferred to the RCU through the control cable between the SBT and the RCU. In the SBT, the OOK signals are demodulated and converted into RS485 signals. Then, the RS485 signals are sent to the RCU.

After the RCU receives the RS485 signals, it runs the command as specified in the signals.

Figure 2-1 shows the configuration of cabinet + BT + RET antenna + RCU + SBT.

Figure 2-1 Cabinet + BT + RET Antennas + RCU + SBT

2.2 Cabinet + BT + Cascaded RET Antennas + RCU + SBT

In this typical configuration, the antenna system consists of the cascaded RET antenna, BT, SBT, RCU, and feeders. The AISG port on the SBT is connected to the RCU through an AISG control cable.

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After the OOK signals and DC power enters the SBT, the DC power is transferred to the RCU through the control cable between the SBT and the RCU. In the SBT, the OOK signals are demodulated and converted into RS485 signals. Then, the RS485 signals are sent to the RCU.

After the RCU receives the RS485 signals, it runs the command as specified in the signals.

Cascaded RCUs can be used when the antennas for three sectors are installed on the same pole or tower and within a short distance of each other.

Figure 2-2 shows the configuration of cabinet + BT + cascaded RET antenna + RCU + SBT.

Figure 2-2 Cabinet + BT + cascaded RET Antennas + RCU + SBT

