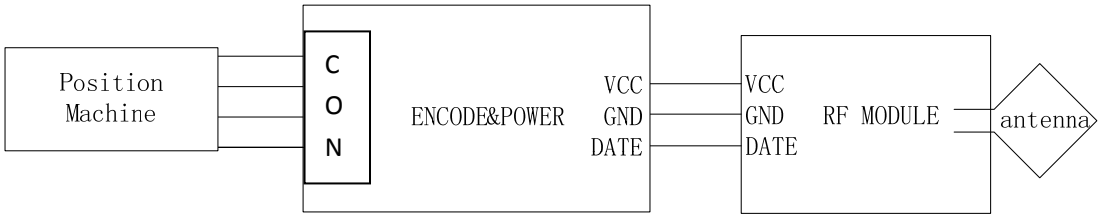
working principle

FIGURE 1



As shown in Fig.1, via an emulating SPI communication interface CON , information from the mainframe is transmitted to the encoder circuit board “Encode” at a communication speed of 122Hz. When the MCU on the encoder board identifies the starting position of the data, it outputs Manchester code in an encode format of “header code + address code + condition + check code”.

the following operating mode is used: the transmitting module transmits several sets of identical data in 0.6 second, then, after 20 seconds of pause, receives data again from the mainframe and repeats the above transmitting process.

Table 1 is the main characteristic parameters of the transmitting module.。

Parameter	Symbol	Condition	Value			unit
			min	typ	max	
PowerSupply Modulation input Voltage	Vcc		3.3	3	12	V
Outout Power	Pout			+10		dBm
Supply current	Idd			18		mA
Supply voltage Range						
Data Rate	Ddate			10		Kbps
Work Ffrequency	Frf			433.92		MHz
Modulate			ASK			
Operating temperature			-20℃～+60℃			