

Technical Memo

Subject: Antenna Options

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Purpose

This document is to provide requested information to the FCC/IC test laboratory and their TCB with regard to approved antennas for the SFFR6 models:

- FCC ID: 2ADAKSFFR6V2/IC: 9487A-SFFR6V2
- FCC ID: 2ADAKSFFR6UL2/IC: 9487A-SFFR6UL2
- FCC ID: 2ADAKSFFR6UH2/IC: 9487A-SFFR6UH2

Note the user manual for the SFFR6 ES1002-UM02 now contains the list of the approved antenna types, this document augments the data with photographs as requested by the TCB.

Background

Industry Canada ISS-GEN (issue 5) requests details of approved antenna types for transmit antennas, including the:

1. Antenna Type
2. Gain (dBi)
3. Impedance

Approved Transmit Antenna Types

The approved antenna types are not intended to be manufacture specific.

The approved antenna types as listed in the user manual for the radio transmitter FCC ID: 2ADAKSFFR6V2/IC: 9487A-SFFR6V2.

Antenna Type	Gain (dBi)	Impedance
1/4 wave omnidirectional	2.15	50 Ω
1/2 wave dipole omnidirectional	2.15	50 Ω
1/2 wave omnidirectional	4.15	50 Ω
5/8 wave omnidirectional	5.15	50 Ω

Table 1 Approved Antennas FCC ID: 2ADAKSFFR6V2/IC: 9487A-SFFR6V2

The approved antenna types as listed in the user manual for the radio transmitter FCC ID: 2ADAKSFFR6UL2/IC: 9487A-SFFR6UL2 and the radio transmitter FCC ID: 2ADAKSFFR6UH2/IC: 9487A-SFFR6UH2.

Antenna Type	Gain (dBi)	Impedance
1/4 wave omnidirectional	2.15	50 Ω
1/2 wave dipole omnidirectional	2.15	50 Ω
1/2 wave omnidirectional	4.15	50 Ω
5/8 wave omnidirectional	5.15	50 Ω
1/2 wave collinear omnidirectional	5.65	50 Ω
5/8 wave collinear omnidirectional	7.15	50 Ω

Table 2 Approved Antennas FCC ID: 2ADAKSFFR6UL2/IC: 9487A-SFFR6UL2 and FCC ID: 2ADAKSFFR6UH2/IC: 9487A-SFFR6UH2

Sample Photographs Antenna Types



Figure 1 VHF 1/4 Wave Omnidirectional



Figure 2 VHF 1/2 Wave Dipole Omnidirectional



Figure 3 VHF 1/2 Wave Omnidirectional



Figure 4 VHF 5/8 Wave Omnidirectional



Figure 5 UHF 1/4 Wave Omnidirectional



Figure 6 UHF 1/2 Wave Omnidirectional



Figure 7 UHF 1/2 Wave Dipole Omnidirectional



Figure 8 UHF 5/8 Wave Dipole Omnidirectional



Figure 9 UHF 1/2 Wave Collinear Omnidirectional



Figure 10 UHF 5/8 Wave Collinear Omnidirectional

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