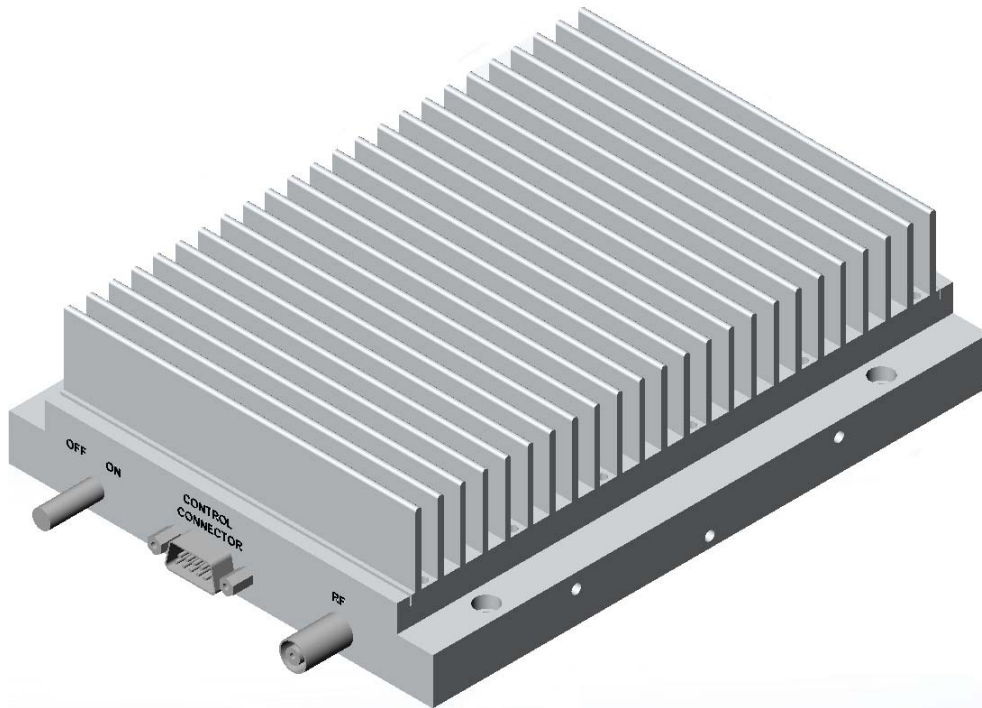




VHF Radio Model 1793



Overview

The Model 1793 VHF Radio is a single-channel, fixed-frequency, low-power AM transmitter intended for base station operation in an air-traffic environment to broadcast audio automated weather observations from the AWOS 3000. The Model 1793 VHF Radio operates over the frequency range from 118.000 MHz to 136.975 MHz. The VHF radio operates using a DC voltage in the range of 11.25 to 16.25 V. The frequency is programmable over the specified frequency range with a channel spacing of 25 kHz.

The Model 1793 radio comes complete with a mounting bracket and a cable assembly to connect the radio to the AWOS 3000 CDP Peripheral Interface Board and to the power supply shared with the CDP.

An RG-58 antenna cable in the AWOS 3000 CDP rack connects the antenna output of the VHF radio to the antenna connector on the back of the CDP rack.

SPECIFICATIONS

Parameter	Specification
Emission Type	6K00A3E (formerly 6A3E)
Frequency Range	118.000 to 136.975 MHz
Channel Spacing	25 kHz
Duty Cycle	100%
Transmitter Power Output	Adjustable (1 to 3 W)
Output Power Stability	1 W
VSWR	4:1
Carrier Stability (-40 to 55°C)	±1.000 Hz max
Audio Input	0.5 V _{rms} to 2.0 V _{rms} (Line level)
Modulation Capability	Adjustable (50% to 95%)
Audio Distortion (90% Modulation)	10% max
Audio Frequency Response	300 Hz to 2500 Hz (+1, -3 dB)
Spurious Emissions	60 dB below carrier
Hum and Noise Level	45 dB below carrier
Voice/Keying Connector	DB9 (female 9-pin D-sub connector)
Antenna Connector	BNC
Supply Voltage	9–30 V DC
Current Consumption	Transmit Mode - 2.0 A Standby - 250 mA
Operating Temperature	-40 to +60°C (-40 to +140°F)
Storage Temperature	-55 to + 65°C (-67 to +149°F)
Humidity	up to 90% noncondensing
Enclosure	Aluminum

ORDERING INFORMATION

Part Number	Description
1793	VHF Radio with Cable & Antenna

DIMENSIONS & WEIGHTS

Product Dimensions	216 mm W x 59 mm H x 150 mm D (8.50" x 2.50" x 5.90")
Weight	1.3 kg (3.0 lb)
Shipping Weight	2.3 kg (5.0 lb)



All Weather Inc.

www.allweatherinc.com

Phone: 916-928-1000
USA Toll Free: 800-824-5873
Fax: 916-928-1165

Rev. A 05/2019