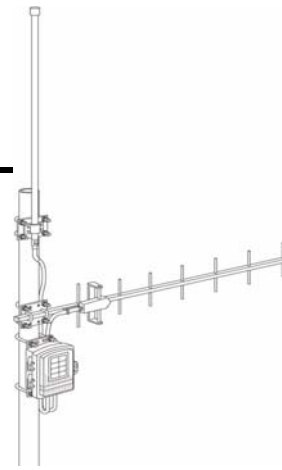


Long-Range Wireless Repeater AC and Solar Powered

7653
7654

Weather Accessories



Long-Range Wireless Repeaters works in much the same way as the Vantage Pro2 Wireless Repeaters (#7626, 7627), but extends the range and reception between a transmitting station and a receiver by up to 10 times that of the standard wireless repeater.

The Long-Range Wireless Repeater (US Version only, see note below) works in conjunction with two external antennas (#7656, #7660), one for receiving and one for transmitting, to retransmit data over greater distances than a wireless repeater with the standard dipole antenna. Transmission distances vary depending on the antennas selected and how they are used in a network. The Long-Range Wireless Repeater can listen for up to eight different transmitter signals and can pass those signals on to another repeater or to any number of receivers.

AC-powered long-range repeaters (#7653) include an AC-power adapter and battery. Solar-powered repeaters (#7654) include a solar power panel, regulator and battery. The external Omni-direction (#7656) and Yagi (#7660) antennas used in conjunction with the long-range repeater should be purchased separately.

Note: Davis Instruments sells FCC Type approved antennas in conjunction with the long-range repeater. These antennas are available for US customers only. US customers must use these antennas. Overseas customers are responsible for procuring their own long-range antennas for use with the Long-Range Wireless Repeater that comply with local regulations. These transmitting antennas have an 8 dBi gain limit (the receiving antennas have no gain limitations). There is a limit of no more than four transmitter IDs to comply with the EN 300 220 regulation for all overseas customers.

General

Operating Temperature -40° to +150°F (-40° to +65°C)
 Non-operating Temperature -40° to +150°F (-45° to +70°C)
 Current Draw 0.3 ma (with 1 ID)
 AC-Power Adapter (7653 only) 5 vdc, 200 ma regulated
 Primary Power Source (7654 only) Solar Power
 Secondary Power Source Battery back-up
 AC-Power Adapter (AC-powered only) 5 VDC
 Batteries CR 123A 3-volt lithium battery
 Battery Life Estimates (with no solar or AC power input):

# of IDs [†]	Estimated Life Expectancy (Months)
1	4
4	1.5
8	<1

[†] Both received directly by the repeater and those IDs repeated from the previous repeater in a chain.

Note: Battery life in excess of two years is expected with normal solar input.

Solar Panel 0.5 Watts
 Antenna Connectors (US Versions only) Reverse-polarity TNC female
 Antenna Connectors (OV, EU, UK models) TNC Female
 Housing Material UV-resistant PVC plastic
 Dimensions (Listed by length x width x height)
 Wireless repeater only (Both Models) 6.3" x 2.3" x 7.9" (159 mm x 57 mm x 200 mm)
 Weight
 Repeater (AC-powered)^{*} 1.2 lbs. (.54 kg)
 Repeater (Solar-powered)^{*} 1.2 lbs. (.54 kg)

Transmit Interval

Repeater Transmit Interval 2.5625 - 3.0000 seconds per ID.

Wireless Communication (US models)

Transmit/Receive Frequency 902-928 MHz FHSS (Frequency Hopping Spread Spectrum)

ID Codes Available 8

Output Power 902-928 MHz FHSS: FCC-certified low power, less than 8 mW, no license required

Type	Gain
Omnidirectional Antenna (#7655)	5 dBi
Yagi Antenna (#7660)	11 dBi

Range

Line of Sight up to 2 miles (3 km)

Wireless Communication (OV, EU, UK models)

Transmit/Receive Frequency 868.0 - 868.6 MHz FHSS (Frequency Hopping Spread Spectrum)

ID Codes Available 8

Output Power 868.0 - 868.6 MHz FHSS. CE-certified, less than 8 mW, no license required. No more than four transmitter IDs to comply with the EN 300 220 regulation. There is an 8 dBi gain limit for the transmitting antenna.

Range

Line of Sight up to 1.5 km (5000')

Package Dimensions

Product #	Package Dimensions (Width x Height x Depth) Not Including Antennas	Package Weight	UPC Codes
7653	11.75" x 3.00" x 7.00" (299 mm X 76 mm x 178 mm)	1.8 lbs. (0.83 kg)	011698 00825 4
7653EU			011698 00826 1
7626UK			011698 00827 8
7627			011698 00828 5
7627OV			011698 00829 2