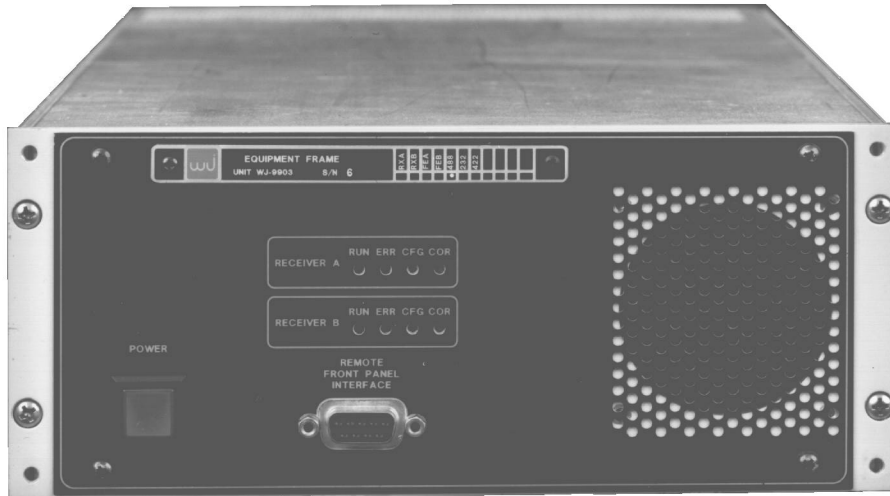# Technical Data

wj **WATKINS-JOHNSON**

Equipment Frame
WJ-9903-3

The WJ-9903-3 Equipment Frame is a half-rack package that holds up to two WJ-8604 or WJ-8604A *Miniceptor* Receivers, with or without frequency extenders. The frame includes:

- Integral AC power supply
- Space for an optional host interface
- Twist-lock AC-power connector
- Individual multipin cable harnesses to connect each receiver to the rear panel
- TNC rear-panel connectors for receiver analog inputs and outputs
- Front-panel power on/off switch
- Four front-panel status indicators for each receiver
- Individual RS-232 serial ports to control each receiver (without the host interface option)

The optional Host Interface allows a choice of one of three interfaces: IEEE-488, RS-232C, or RS-422A. Each receiver in the frame has a unique address on the single host interface port. The host interface mounts inside the frame. It converts the selected interface protocol to Hewlett Packard Interface Loop (HPIL), used by the WJ *Miniceptor* Receivers. If WJ-8604A *Miniceptors* are installed, the WJ-9903-3 host interface option requires the WJ-8604A/HPIL option. The host-interface also includes a WJ Receiver Net Interface that allows a net *controller* to access the receivers in the frame. This option adds a front-panel jack for controlling the receivers by a WJ-9605 Front Panel Unit (FPU), or other RS-232 device.

Features

- ❏ *Half-rack chassis that holds up to 2 receivers*
- ❏ *Integral power supply*
- ❏ *Optional host interface (IEEE-488, RS-232C, RS-422A)*
- ❏ *Mounting compatibility with other WJ half-rack equipment*

HEIGHT*	3.5 in (8.89 cm)	**DEPTH***	20 in (50.80 cm)
WIDTH*	8.25 in (20.96 cm)	**WEIGHT****	8 lbs (3.61 kg)

*   Excluding connectors & handles
** Nominal (frame w/host interface)

WJ-9903-3

Specifications

Max Power Consumption .... 70 W, nominal
(Fully loaded with 2 receivers & host interface)
Cooling Method .... Fan-forced air
Operating Temperature .... 0 to 50°C

Frame & Receiver Input/Output (I/O)

- AC Power 110 to 220 V, 44 to 440 Hz (twist-lock connector)

- Optional host interface (IEEE-488, RS-232C, RS-422A) includes receiver net interface (RS-485) & HPIL, which adds front-panel control jack to use with the WJ-9605 FPU

- Switched audio output (SAO) (TNC)

- HPIL I/O

- External reference input per receiver installed (TNC)

- Receiver Signals (1/receiver)
  -- Antenna Input (TNC)
  -- Signal Monitor output or optional wideband output (TNC)
  -- Selected 21.4-MHz IF output (TNC)
  -- Auxiliary multipin connector (9-Pin D connector)
       COR TTL output signal
       Spectrum invert TTL output signal
  -- Auxiliary serial I/O -- use-dependent on receiver firmware (9-Pin D connector)
       Serial output RS-232
       Serial input RS-232
       Serial I/O RS-485 differential
  -- FM monitor output (TNC)

Options

Model #	Functions	Physical Characteristics
9903/488 IEEE-488 Host Interface	• Allows host control of receivers • Performs HPIL conversions • Allows receiver control by WJ Receiver Net Controller • Permits operation with 9605 FPU	• IEEE-488 • Includes WJ Receiver Net Interface • Adds front-panel jack
9903/232 RS-232C Host Interface	Same as 9903/488	Same as 9903/488 except via RS-232C interface
9903/422 RS-422A Host Interface	Same as 9903/488	Same as 9903/488 except via RS-422A interface