

**AN/PSC-7
Lightweight Satellite Transceiver**

NSN: 5820-01-366-8919

Reference: To be determined

General Information

The AN/PSC-7 is exclusively for use in the Commanders WarFighter Network. This radio is an improved version of the HST-4A and includes improvements of increased power output, 30 percent more efficient, better off-frequency noise rejection and compatibility to the KY-99. It provides satellite or LOS communication in data or voice modes. The small, lightweight transceiver operates in the UHF band from 225 to 400 MHz. A two-card modem is built in providing 1200 or 2400 bp/s data capability as well as up to 16 kb/s FSK to transmit and receive.

Technical Characteristics

Frequency Range	225 to 399.995 MHz
Tuning Increments	5 kHz; FM, X, D1.2, or D2.4 data mode 25 kHz; AM modes
Power Output-(variable)	<1 to 22 W (SAT) continuously from 1 W to max output <1 to 2 W (LOS) continuously from 1 W to max output
Preset Channels	4 preset, one manual
Receive Offset Frequency	0 to +/- 174.995 MHz offset from the transmit frequency
Frequency Stability	+/-1 ppm over temperature and supply voltage for one year
Guard Channel	243,000 MHz AM
Signal Strength	Five-light display and indicates receive signal strength and relative indication of transmit power in all modes
Data Rates:	
With Built-In Modem	1200 bp/s, 2400 bp/s; BPSK, DBPSK
Wideband Secure Voice	16 kb/s; FM-FSK and AM-ASK with KY-57
Remote Control	All models, presets, and frequencies can be remotely controlled through the X-mode connector serial input
Weight	3.1 kg (7 lb)

**Technical Characteristics
(Cont.)**

Input Voltage	+24 V DC nominal (20 to 30 V DC without degradation)
Current Consumption	22 A receive, 3.5 A transmit
Power Source	BB-590/U Rechargeable Nickel-Cadmium Battery BA-5590/U Lithium Battery
Antenna	Omnidirectional whip antenna. For LOS; medium-gain, collapsible antenna for at-halt communications

**AN/PSC-7
Lightweight Satellite Transceiver**

