

SPECIFICATIONS (Single-band):

Characteristic	Specification
Size, weight	6 cubic inches, 2.00" (W) x 3.00" (L) x 1.00" (H), 6.7 oz.
Modulation type	PCM/FM (ARTM Tier 0), SOQPSK-TG (Tier I), and Multi-h CPM (Tier II)
RF output power	5 mW, 5 W, 10 W, or 20 W, specify in model number Option DP: Dual power, 2 settings, selectable via serial control Option VP: Variable power, 31 settings over 24 dB range (non-uniform, largest step approximately 1 dB)
Carrier frequency tuning range, any one model covers all of any one band	Lower L-band: 1435.5 MHz to 1534.5 MHz Upper L-band: 1750.0 MHz to 1855.0 MHz S-band: 2200.5 MHz to 2394.5 MHz
Carrier frequency tuning increment	0.5 MHz
Carrier frequency accuracy	± 2.5 ppm over temperature ± 7.5 ppm, all causes, including aging over 5 years
Data (bit) rate, automatic rate adaptation	Standard: 1-20 Mbps (0.5-10 Mbps for PCM/FM) Option LR: Extends lower limit to 50 kbps (25 kbps for PCM/FM) Option HR: Extends upper limit to 28 Mbps (14 Mbps for PCM/FM)
Input voltage	+28 ± 4 VDC
Input current at 28 VDC	5 Watt (05S models): 1.2 Amps max all conditions; 1.1 Amps typ. 10 Watt (10S models): 1.8 Amps max all conditions; 1.5 Amps typ. 20 Watt (20S models): 2.9 Amps max all conditions; 2.5 Amps typ.
Power reversal	Reverse voltage protection
Turn-on startup time	< 240 mS
Control interface	RS-232 serial control
Signal interfaces	Serial data with separate synchronous clock, TTL or TIA/EIA-422
Randomizer	15-stage LFSR, per IRIG 106. Selectable for bypass or enable

MODEL NUMBERS:

Q S X - V ○ ○ - ○ ○ ○ - ○ ○ S - 20 - ○ ○

Band (L = Lower L, U = Upper L, S, or M = Tri-band)

Baseband Interface (T = TTL, R = RS-422)

ARTM Tier 0, PCM/FM (1 = Include, 0 = Exclude)

ARTM Tier I, SOQPSK-TG (1 = Include, 0 = Exclude)

ARTM Tier II, Multi-h CPM (1 = Include, 0 = Exclude)

Power in Watts (00, 05, 10, or 20)

Package (6A = single-band, 7A = tri-band, 9A = EC / PF / PM options)

Options (separate multiple options by a dash "-")

OPTIONAL FEATURES:

- > PS Multiple presets (specify 2, 4, 8, or 16)
- > WV Wide input voltage range
- > CG Clock generator output
- > RN Randomizer output
- > DP Dual power (two settings, "full" and "low" – specify settings)
- > AC Automatic carrier wave output
- > VP Variable power (31 settings, spanning 24 dB)
- > CF Clock-free baseband interface
- > HR Increases max bit rate to 28 Mbps (14 Mbps for Tier 0)
- > LR Decreases min bit rate to 50 kbps (25 kbps for Tier 0)
- > EC Forward Error Correction / Turbo Product Codes
- > PF Parallel Port Frequency Programming
- > PM Parallel Port Mode Selection