

# FSG-7016 TECHNICAL SPECIFICATIONS

## Leading Particulars

Model:	FSG 7016 System, 7,000 CH, Article-No. F10165
Frequency Range:	225.000 MHz to 399.975 MHz = 7,000 channels
Frequency Selection:	16 pre-set channels, together with 1 out of 3 different TX outputs (1 W / 0.4 W / 0.1 W or RX mode only)
Operating Mode:	Simplex
Modulation:	AM A3E, 350 ... 3,000 Hz
Power Supply:	Detachable, rechargeable 12 Vdc nickel-cadmium battery pack, 1,400 mAh, with built-in temperature sensor. External 10 Vdc to 15 Vdc via 10-pole accessory connector, input current 1.2 A maximum. Switched 12 Vdc output for attached accessories, drain 150 mA maximum.
Input Current:	Standby (STBY): 42 mA, RX: 150 mA, TX: 0.4 ... 1.2 A

## Transmitter

### Characteristics:

Power Output:	Pre-set 0.1 W / 0.4 W / 1.0 W or RX mode only, programmed together with channel frequency
Frequency Accuracy:	$\leq + 2.5$ ppm (max. $\pm 1$ kHz), 0°C to +40°C/32°F to 104°F $\leq + 5$ ppm (max. $\pm 2$ kHz), -20°C to +60°C/-4°F to 140°F
Spurious/Harmonic Radiation:	-60 dBc/50 Ohm
Carrier Noise level:	$\geq 40$ dB, 1 kHz, 75% modulation
Adjacent Channel Suppression:	$\geq -75$ dB at $\geq + 25$ kHz, 60% mod. +10 dB/1,250 Hz
Modulation AF Response:	350 ... 3,000 Hz $\leq -6$ dB (0 dB = 1 kHz)
Modulation Distortion:	$\leq 10\%$ at 90% modulation, 400 Hz ... 3,000 Hz

Modulation Capability: Built-in modulation compressor,  
≥ 80% AM at 300 MHz, 0°C to +40°C / 32°F to  
104 of ≥ 70% AM at 225 MHz... 340 MHz, -  
20°C to +60°C /  
-4°F to 140°F

Modulation AF Input level: 0.5 mV to 10 mV for ≥75%\_AM, adjustable in 7  
steps

Duty Cycle: Transmit Time-Out- Timer limits transmission  
electronically to 5 minutes to save battery capacity,  
and to prevent blocked channel.

**Receiver Characteristics:**

Sensitivity: ≤1μV / -107dBm for 6dB S+N/N

Selectivity: ≥ 8 kHz/ -6 dB

Spurious  
Frequency Rejection: ≥ -70 dB, including I F image rejection

Audio Power Output: ≥ 1W (internal speaker)

**Physical and Environmental Data:**

Overall Dimensions: 75 x 38 x 225 mm (WxDxH), without antenna  
2.95" x 1.5" x 8.86" (WxDxH), without antenna 1.2  
kg (2.6 lb.), including battery, removable/adjustable  
carrying strap and helical antenna

Operating  
Temperature Range: -20°C to +60°C / -4°F to 140°F

Slightly Degraded  
Performance: -30°C to +60°C / -22°F to 140°F

Charging  
Temperature Range: +10°C to +40°C / 50°F to 104°F

Submersible  
(with antenna attached): 1.0 m (3 ft) for 30