We’ve put exceptional flexibility into an advanced mission critical mobile radio that’s easy to operate and intuitive to use. The APX 6500 P25 mobile allows users to choose from 4 control heads, mid and high power models and multiple installation configurations in an easy to install design. Innovative safety features such as GPS location tracking, intelligent lighting and one-touch controls help to keep first responders safer than ever before.

Focus on the task not the technology, with the hardworking mission critical mobile that turns mission critical into mission complete.

FLEXIBLE PLATFORM
- Interchangeable control heads that best support your operational needs - O2, O3, O5, O7 and O9
- Two transceiver options - high-power and mid-power
- Dual control head support offered on the O2, O5, O7 and O9 control heads

EASY TO INSTALL AND EFFORTLESS TO USE
- Mid-power model fits into any existing XTL footprint, so you can reuse mounting holes and cables
- High-power model trunnion design lets you remove the radio without removing the cables
- 12 character RF ID label helps you track information without uninstalling your radio

CUTTING-EDGE TECHNOLOGY AND ADVANCED FEATURES
- Project 25 Phase 2 technology provides twice the voice capacity
- Integrated GPS lets you locate and track an individual or vehicle
- Advanced features like intelligent lighting, radio profiles and text messaging improve communication and coordination
APX™ 6500 SPECIFICATIONS

FEATURES AND BENEFITS:
Available in 700/800 MHz, VHF, UHF R1 and UHF R2 bands
Channels: 1000*
Trunking Standards supported:
- Clear or digital encrypted Trunked Operation
- Capable of SmartZone®, SmartZone Omnilink, SmartNet®
Analog MDC-1200 and Digital APCO P25
Conventional System Configurations
Narrow and wide bandwidth digital receiver (6.25kHz/12.5kHz)
Embedded digital signaling (ASTRO and ASTRO 25)
Integrated Encryption Hardware
Software Key
ASTRO 25 Integrated Voice & Data
Intelligent lighting
Integrated GPS/GLONASS for outdoor location tracking
Radio profiles
Unified Call List
Meet applicable MIL-STD 810C, D, E, F and G
Ships standard IP54
Utilizes Windows XP, Vista and Windows 7and 8
Customer Programming Software (CPS)**
Supports USB Communications
Built in FLASHport™ support
Re-use of most XTL™ accessories, plus new IMPRES accessories

OPTIONAL FEATURES:
Enhanced Encryption Software Options
Programming over Project 25 (POP 25)
Text Messaging
Over the Air Rekeying (OTAR)
12 character RF ID asset tracking
Tactical OTAR
Siren and Light Interface Module

DIMENSIONS

TRANSMITTER - TYPICAL PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>700 MHz</th>
<th>800 MHz</th>
<th>VHF</th>
<th>UHF Range 1</th>
<th>UHF Range 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range/Bandspits</td>
<td>764-776 MHz</td>
<td>806-824 MHz</td>
<td>136-174 MHz</td>
<td>380-470 MHz</td>
<td>450-520 MHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
</tr>
<tr>
<td>Maximum Frequency Separation</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
</tr>
<tr>
<td>Rated RF Output Power Adj’</td>
<td>10-30 W</td>
<td>10-35 W</td>
<td>10-50 W or 25-110 W</td>
<td>10-40 W or 25-110 W</td>
<td>10-40 W or 25-110 W</td>
</tr>
<tr>
<td>Frequency Stability’ (–30°C to +60°C, +25°C Ref.)</td>
<td>±0.00015 %</td>
<td>±0.00015 %</td>
<td>±0.0002 %</td>
<td>±0.0002 %</td>
<td>±0.0002 %</td>
</tr>
<tr>
<td>Modulation Limiting’</td>
<td>±5 kHz / ±2.5 kHz</td>
<td>±5 kHz/±4 kHz (NPSPAC) /±2.5 kHz</td>
<td>±5 kHz / ±2.5 kHz</td>
<td>±5 kHz / ±2.5 kHz</td>
<td>±5 kHz / ±2.5 kHz</td>
</tr>
<tr>
<td>Modulation Fidelity (C4FM) 12.5kHz Digital Channel</td>
<td>±2.8 kHz</td>
<td>±2.8 kHz</td>
<td>±2.8 kHz</td>
<td>±2.8 kHz</td>
<td>±2.8 kHz</td>
</tr>
<tr>
<td>Emissions’ Conducted+</td>
<td>–75/–85 dBc</td>
<td>–75 dBc</td>
<td>–75 dBc</td>
<td>–75 dBc</td>
<td>–75 dBc</td>
</tr>
<tr>
<td>Conducted+</td>
<td>–20/–40 dBm</td>
<td>–50 dB</td>
<td>–50 dB</td>
<td>–50 dB</td>
<td>–50 dB</td>
</tr>
<tr>
<td>Radiated+</td>
<td>–3 dB (EIA)</td>
<td>–3 dB (EIA)</td>
<td>–3 dB (EIA)</td>
<td>–3 dB (EIA)</td>
<td>–3 dB (EIA)</td>
</tr>
<tr>
<td>Audio Response’</td>
<td>+1, –3 dB (EIA)</td>
<td>+1, –3 dB (EIA)</td>
<td>+1, –3 dB (EIA)</td>
<td>+1, –3 dB (EIA)</td>
<td>+1, –3 dB (EIA)</td>
</tr>
<tr>
<td>FM Hum &amp; Noise 25 kHz</td>
<td>12.5 kHz</td>
<td>–50 dB</td>
<td>–50 dB</td>
<td>–50 dB</td>
<td>–50 dB</td>
</tr>
<tr>
<td>Audio Distortion’</td>
<td>2 %</td>
<td>2 %</td>
<td>2 %</td>
<td>2 %</td>
<td>2 %</td>
</tr>
</tbody>
</table>

** CPS version R12.00.00 and greater ordered after June 2014 will only support Windows 7 and 8

* Optional enhancement package increases capacity to 3000 channels

DATA SHEET | APX™ 6500
APX 6500 CONTROL HEAD PORTFOLIO

02 RUGGED CONTROL HEAD
- Large color display with intelligent lighting
- 3 lines of text / 14 characters max / 1 line of icons / 1 line of menu
- Built in 7.5 watt speaker
- Multiple control head configuration (up to 2)
- Multifunction volume/channel knob
- Night/day mode button

03 HAND HELD CONTROL HEAD
- Large color display with intelligent lighting
- 2 lines of text / 14 characters max / 1 line of icons / 1 line of menu
- Integrated full size DTMF keypad
- Hand-held control head with intuitive user interface
- Two quick-access side buttons
- Display contrast selector

05 STANDARD CONTROL HEAD
- Tri-color display with intelligent lighting
- 2 lines of text / 14 characters max / 1 line of icons / 1 line of menu
- Available with Keypad Microphone
- Multiple control head configuration (up to 2)
- Display contrast selector

07 ENHANCED CONTROL HEAD
- Large color display with intelligent lighting
- 2 lines of text / 14 characters max / 1 line of icons / 1 line of menu
- Available with Lighting & Siren Controls or DTMF Keypad
- Multiple control head configuration (up to 2)
- Multifunction volume/channel knob
- Night/day mode button

09 INTEGRATED CONTROL HEAD
- Extra-large full color display with intelligent lighting
- 2 lines of text / 14 characters max / 1 line of icons / 1 line of menu
- Integrated full size DTMF keypad
- Large programmable one-touch buttons
- Dedicated siren controls
- Integrated Response Selector
- Night/day mode button

RECEIVER – TYPICAL PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Frequency Range/Bandsplits</th>
<th>700 MHz</th>
<th>800 MHz</th>
<th>VHF</th>
<th>UHF Range 1</th>
<th>UHF Range 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel Spacing</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
<td>25/12.5 kHz</td>
</tr>
<tr>
<td>Maximum Frequency Separation</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
</tr>
<tr>
<td>Audio Output Power at 3% distortion</td>
<td>7.5 W or 15 W ++</td>
<td>7.5 W or 15 W ++</td>
<td>7.5 W or 15 W ++</td>
<td>7.5 W or 15 W ++</td>
<td>7.5 W or 15 W ++</td>
</tr>
<tr>
<td>Frequency Stability* (-30°C to +60°C, +25°C Ref.)</td>
<td>+/-0.8 PPM</td>
<td>+/-0.8 PPM</td>
<td>+/-0.8 PPM</td>
<td>+/-0.8 PPM</td>
<td>+/-0.8 PPM</td>
</tr>
<tr>
<td>Analog Sensitivity† Digital Sensitivity</td>
<td>12 dB SINAD</td>
<td>5% BER</td>
<td>121 dBm</td>
<td>121 dBm</td>
<td>121 dBm</td>
</tr>
<tr>
<td>5% BER</td>
<td>-121 dBm</td>
<td>-121 dBm</td>
<td>-121 dBm</td>
<td>-121 dBm</td>
<td>-121 dBm</td>
</tr>
<tr>
<td>Intermodulation</td>
<td>25 kHz</td>
<td>12.5 kHz</td>
<td>25 kHz</td>
<td>12.5 kHz</td>
<td>25 kHz</td>
</tr>
<tr>
<td>Spurious Rejection</td>
<td>91 dB</td>
<td>12 dB</td>
<td>91 dB</td>
<td>12 dB</td>
<td>91 dB</td>
</tr>
<tr>
<td>Audio Distortion at rated †</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>FM Hum &amp; Noise</td>
<td>25 kHz</td>
<td>12.5 kHz</td>
<td>25 kHz</td>
<td>12.5 kHz</td>
<td>25 kHz</td>
</tr>
<tr>
<td>Selectivity†</td>
<td>25 kHz</td>
<td>12.5 kHz</td>
<td>30 kHz</td>
<td>25 kHz</td>
<td>12.5 kHz</td>
</tr>
<tr>
<td>SIGNSIGNING (ASTRO MODE)</td>
<td>65,000 Conventional / 4,094 Trunking</td>
<td>4,096 network site addresses</td>
<td>4,094 network site addresses</td>
<td>65,000 Conventional / 4,094 Trunking</td>
<td>65,000 Conventional / 4,094 Trunking</td>
</tr>
<tr>
<td>Channels</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Tracking Sensitivity</td>
<td>-153 dBm</td>
<td>-153 dBm</td>
<td>-153 dBm</td>
<td>-153 dBm</td>
<td>-153 dBm</td>
</tr>
<tr>
<td>Accuracy**</td>
<td>&lt;10 meters (95%)</td>
<td>&lt;10 meters (95%)</td>
<td>&lt;10 meters (95%)</td>
<td>&lt;10 meters (95%)</td>
<td>&lt;10 meters (95%)</td>
</tr>
<tr>
<td>Cold Start</td>
<td>&lt;60 seconds (95%)</td>
<td>&lt;60 seconds (95%)</td>
<td>&lt;60 seconds (95%)</td>
<td>&lt;60 seconds (95%)</td>
<td>&lt;60 seconds (95%)</td>
</tr>
<tr>
<td>Hot Start</td>
<td>&lt;10 seconds (95%)</td>
<td>&lt;10 seconds (95%)</td>
<td>&lt;10 seconds (95%)</td>
<td>&lt;10 seconds (95%)</td>
<td>&lt;10 seconds (95%)</td>
</tr>
<tr>
<td>Mode of Operation</td>
<td>Autonomus (Non-Assisted) GPS</td>
<td>Autonomus (Non-Assisted) GPS</td>
<td>Autonomus (Non-Assisted) GPS</td>
<td>Autonomus (Non-Assisted) GPS</td>
<td>Autonomus (Non-Assisted) GPS</td>
</tr>
</tbody>
</table>

DATA SHEET | APX™ 6500
ENCRYPTION

Supported Encryption Algorithms
- ADP, 256-bit AES, DES, DES-XL, DES-OFB, DVP-XL

Encryption Algorithm Capacity
- 8

Encryption Keys per Radio
- Module capable of storing 1024 keys
- Programmable for 64 Common Key Reference (CKR) or 16 Physical Identifier (PID)

Encryption Frame Re-sync Interval
- P25 CAI 300 mSec

Encryption Keying
- XL – Counter Addressing
- OFB – Output Feedback

Vector Generator
- National Institute of Standards and Technology (NIST) approved random number generator

Encryption Type
- Digital

Key Storage
- Tamper protected volatile or non-volatile memory

Key Erasure
- Keyboard command and tamper detection

Standards
- FIPS 140-2 Level 3
- FIPS 197

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature
- -30ºC / +60ºC

Storage Temperature
- -40ºC / +85ºC

Humidity
- Per MIL-STD

ESD
- IEC 801-2 KV

Water and Dust Intrusion
- IP54, MIL-STD

SPECIFICATIONS

POWER AND BATTERY DRAIN

Model Type
- 136-174 MHz, 380-470 MHz, 450-520 MHz, 764-870 MHz

Minimum RF Power Output
- 10-35 W (764-870 MHz), 10-50 W or 25-110 W (136-174 MHz), 10-40 W or 25-110 W (380-470 MHz), 10-45 W (450-485 MHz), 10-40 W (485-512 MHz), 10-25 W (512-520 MHz)

Operation
- 13.8V DC ±20% Negative Ground

Standby Current at 13.8V
- 0.85 A (764-870 MHz), 0.85 A (136-174 MHz), 0.85 A (380-470 MHz), 0.85 A (450-520 MHz)

Receive Current at Rated Audio at 13.8V
- 3.2 A (764-870 MHz), 3.2 A (136-174 MHz), 3.2 A (380-470 MHz), 3.2 A (450-520 MHz)

Transmit Current (A) at Rated Power
- 136-174 MHz (10-50 W), 380-470 MHz (10-40 W), 380-470 MHz (10-40 W), 764-870 MHz (10-35 W), 136-174 MHz (25-110 W), 380-470 MHz (25-110 W), 12 A (50 W), 8 A (15 W)

ENCRYPTION

FCC TYPE ACCEPTANCE ID

<table>
<thead>
<tr>
<th>BAND</th>
<th>OUTPUT POWER</th>
<th>TRANSMITTER NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>764-870 MHz</td>
<td>10-35 W</td>
<td>AZ492FT5858</td>
</tr>
<tr>
<td>136-174 MHz</td>
<td>25-110 W</td>
<td>AZ492FT3821</td>
</tr>
<tr>
<td>136-174 MHz</td>
<td>10-50 W</td>
<td>AZ492FT3824</td>
</tr>
<tr>
<td>380-470 MHz</td>
<td>10-40 W</td>
<td>AZ492FT4894</td>
</tr>
<tr>
<td>380-470 MHz</td>
<td>25-110 W</td>
<td>AZ492FT4897</td>
</tr>
<tr>
<td>450-520 MHz</td>
<td>10-45 W</td>
<td>AZ492FT4896</td>
</tr>
</tbody>
</table>

* Measured in the analog mode per TIA/EIA 803 under nominal conditions
** Accuracy specs are for long-term tracking (95th percentile values >5 satellites visible at a nominal ~130 dBm signal strength)
++ Output power in to 8 and 3.2 Ohm external speakers respectively

Specifications subject to change without notice. All specifications shown are typical.

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