

X-BAND RADAR TRANSPONDER

MODEL 367X-1



SUPPLYING HIGH PERFORMANCE, INNOVATIVE AND SOPHISTICATED RF, MICROWAVE, MILLIMETER WAVE COMPONENTS AND INTEGRATED ASSEMBLIES WORLDWIDE.

DESCRIPTION

The 367X-1 radar transponder is navigational aid beacon suitable for positioning offshore drilling sites, buoy moorings, and most seamark and landmark locations. The beacon function will assist the pilot in locating or identifying a particular oil rig when it is surrounded by many others. The 367X-1 transponder operates in the 9.3 to 9.5 GHz frequency range. It is primarily used as a radar tracking aid and provides a switch-selectable, time-coded, target enhancement, multi-purpose reply for positive identification on the radar's PPI (Plan Position Indicator) display.

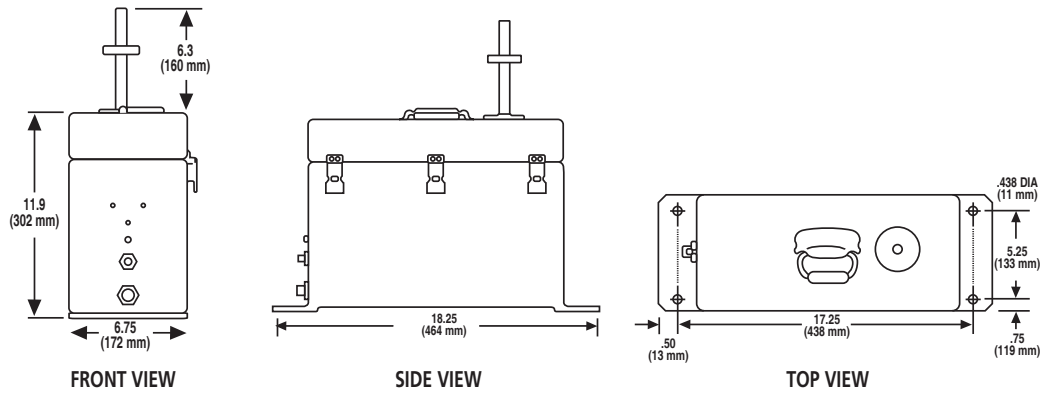
The 367X-1 transponder is housed in a weather-resistant rugged transit case. The antenna and carrying handle attach to the top, and mounting ears are provided on the bottom. The 519-1 Rechargeable Battery Pack is designed to attach to the rear of the model 367X-1 transponder case.

The design of the 367X-1 utilizes the latest in modern devices and circuitry. It is all solid-state, to provide a reliable product with high quality consistency.

FEATURES

- Superheterodyne receiver
- 500 Watt peak power for long-range omnidirectional service
- Operates in the 9.3 to 9.5 GHz range
- Optimize for use with aircraft WX radars with beacon mode
- Non-responsive to short pulse marine surface radars
- A code switch, automatic standby bypass switch, and sensitivity control are accessible by opening the quick-release hinged lid
- Weather resistant rugged transit case
- Switch selectable time-coded replies
- Power saving standby mode





ELECTRICAL

- Frequency Range: 9.3 to 9.5 GHz, Standard frequency 9.310 GHz transmit and 9.375 GHz receive
- Input Voltage: 115 VAC 50/60 Hz single phase (internal selection 230 VAC) or 22 to 30 VDC input voltage
- Input DC Current:
Standby Receiver Mode: 0.3 Amp typical
Standby Ready to Reply Mode: 0.7 Amp typical
Operate Mode: 1.0 Amp typical
- Protection Circuits: Secondary short circuit and input reverse polarity protection, AC line circuit breaker provided

PHYSICAL

- Size: 18.25 x 6.75 x 11.9 inches (46.4 x 17.1 x 30.2 cms).
- Weight: 21 pounds (9.5 kgms)
- Controls: Code Switch, Automatic Stand-by By-pass Switch, Sensitivity Control, ON-OFF Switch

ENVIRONMENTAL

Temperature: -20°C to +71°C

RECEIVER

- Type: Superheterodyne
- Frequency: 9.3 to 9.5 GHz, tunable
- Sensitivity 99% reply: -65 dBm
- Sensitivity Adjustment: Front panel adjustment, -65 to -45 dBm nominal
- Bandwidth: 18 MHz, nominal
- Input Pulse Width: 2.5 ±0.5 micro-seconds
- Interrogate Indicator: Provided on the case

TRANSMITTER

- Type: Magnetron
- Frequency: 9.3 to 9.5 GHz, tunable
- Power Output: 500 Watts, peak
- Pulse Width: 0.4 ±0.1 microsecond
- Reply Codes: 16 front panel selectable
- Coding: 2 to 6 pulses spaced at intervals of 3 microseconds. The first and last pulse are framing pulses and are always present
- Reply Rate: 500 pulse groups per second, maximum
- Internal Delay: 4.7 microseconds, adjustable

ANTENNA

- Polarization: Horizontal
- Gain: 0 dBil, minimum 0° to 30° off horizon, nominal peak gain +2 dBil
- Pattern:
Azimuth - Omnidirectional
Elevation - Peak of beam 15° off horizon, HPBW nominal 50°

OPTIONS

- Remote RF Antenna Cables:
15 feet, p/n 208030-1
25 feet, p/n 208030-2
30 feet, p/n 208030-3
- Battery Pack:
407586-1 Standard Unit, 115 VAC, 50/60 Hz
407586-2 Standard Unit, 230 VAC, 50/60 Hz

BATTERY PACK

- Model 519 Rechargeable Battery Pack is designed to attach to the bottom of the 367X X-Band Transponder.
- Battery Type: Sealed lead acid, maintenance free.
- Battery Voltage: 24 Volts.
- Battery Capacity: 5 Ah.
- Battery Charge Time: 18 hours maximum.
- Typical Discharge Time when Operated with a 367X transponder at +27°C: Standby Life: 18 hours; Operate Life: 7 hours.
- Size: 12" x 4.75" x 7" (30.5 x 12.1 x 17.8 cm).
- Weight: 17.5 pounds (7.9 kg).
- Connector: PT07C-10-6P.
- P/N: 407586

PRODUCT NUMBERS

- P/N 406397-3 - Standard Unit, 115 VAC, 50/60 Hz
- P/N 406397-4 - Standard Unit, 230 VAC, 50/60 Hz



making a difference

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