

367X-1

X-Band Radar Transponder

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FEATURES:

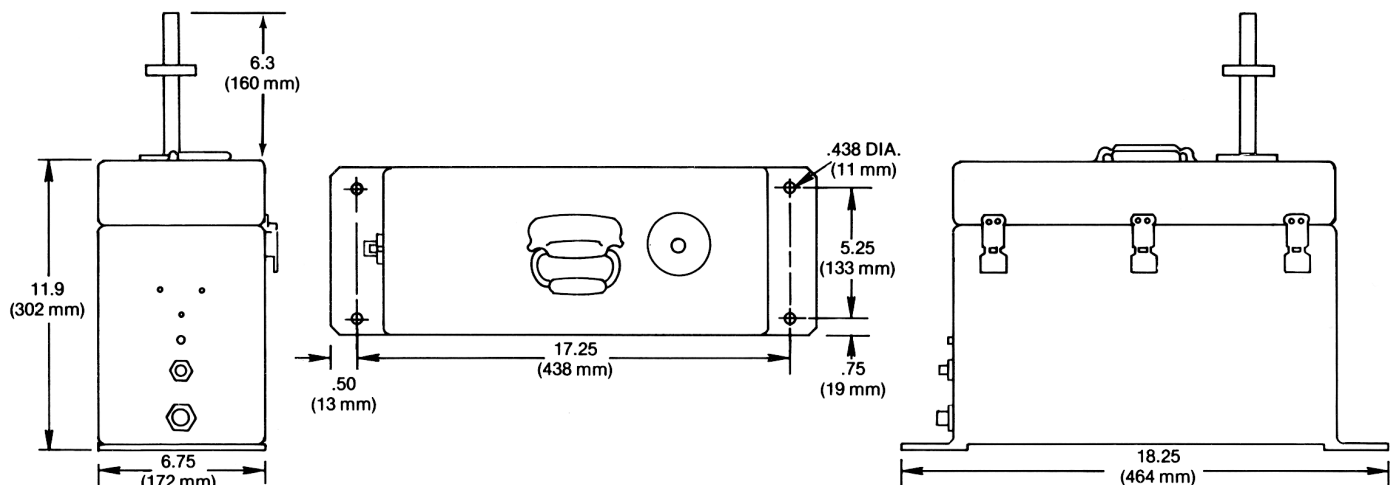
- Superheterodyne receiver
- 500 Watt peak power for long-range omnidirectional service
- Operates in the 9.3 to 9.5 GHz range
- Optimize for use with aircraft WX radars with beacon mode
- Non-responsive to short pulse marine surface radars
- A code switch, automatic standby bypass switch, and sensitivity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



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.



367X-1 X-Band Radar Transponder

Versions: This product is available in several versions. Call to discuss other variations, or your particular requirements.

Product Numbers:

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

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

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

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 microseconds

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°.

BATTERY PACK (OPTIONAL)

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