

# TA3633 Transportable Repeater

## SPECIFICATIONS



# Tough transportable repeater easy to deploy in mission critical situations.

Whether you're dealing with natural disasters, crime scenes, firegrounds, or tactical missions when safety or security is threatened, this transportable repeater allows you to have a reliable communications system deployed rapidly.

Extend your current network coverage or set up a dedicated communications network at the scene.

The Tait TA3633 repeater is an Analog conventional repeater, it can also provide some DMR Tier 2 and P25 repeater operations in digital mode.



### KEY FEATURES

- Supports Analog repeat
- DMR Tier 2 single slot or P25 Conventional operations
- Simple change of channel through the radio interface
- Ultra-narrowband 6.25kHz equivalent technology for DMR Tier 2 mode (1 x TDMA channel slot in one 12.5kHz channel)
- Easy and rapid deployment of single repeater operation
- 12.5kHz analog repeater operation
- Design inside a rugged waterproof Pelican case
- 10-30V DC power supply input, supplied with AC/DC power supply
- Internal SLA battery for rapid field deployment
- Options and accessories for better operational efficiency
- Range of portable antenna mast kits (Soft PVC carry case or Hard PVC Tube kits)
- Extended life battery case (Dual Batteries)



# TA3633 Transportable Repeater

## SPECIFICATIONS



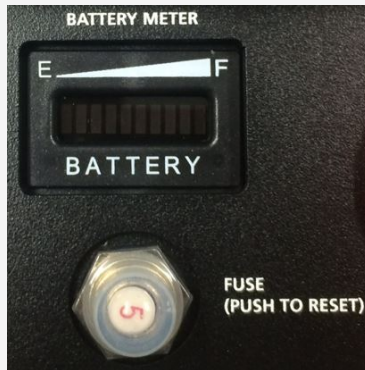
### FEATURES AND BENEFITS

#### Delivering on operational needs

- Easy and rapid deployment of transportable repeater as a single conventional RF channel
- Easy to operate user interface allows operators to change channels using one user interface



- Panel meter gives user a quick indication of the state of the battery before use without the need to use additional test equipment
- Resettable circuit breaker allows users to simply reset the fuse if tripped



#### Developed for transportable operations

- Designed in a rugged Pelican case
- Compact base station easy to transport and deploy
- Output power selection from 1W to the maximum transmit power 4W/5W depending on the frequency band (measured before duplexer)
- Power supply per default configuration: 10-30V DC plus an internal battery with built in charging capability
- Duplexer integrated into the Pelican case
- Optional extra battery pack

#### Designed to support effective deployment

- When pre-configured, just plug in the repeater antenna on site to start operating
- Compatible with analog, DMR Tier 2 and P25 Conventional networks

#### DMR and P25 Conventional

- Designed and tested with the DMR Tier 2 Conventional standard to provide customers with choice of vendor and equipment
- 6.25kHz equivalent 1-slot TDMA for voice and data operation
- Designed to the P25 Conventional voice

#### Range of accessories

- Portable antenna mast kits Soft carry case



#### Hard PVC Pipe



- Dual battery case for when extended operation is needed



- Dual battery case can be connected to a solar panel to charge it when extra long life needed

# TA3633 Transportable Repeater

## SPECIFICATIONS



### FREQUENCY BANDS

Frequency	Range	Tait Band	Configuration
VHF	148-174MHz	B1	Factory set to 5W*
UHF	380-470MHz	HK	Factory set to 4W*
UHF	450-520MHz	H7	Factory set to 4W*

\*The output power of the transportable unit is reduced due to the duplexer loss.

### REGULATORY

	DMR, Analog, P25
Australia/New Zealand AS/NZS4768)	B1
Safety (EN60950)	B1

### GENERAL

#### Radio specifications

Frequency stability	+/- 0.5 ppm
Channels	1,000
Channel spacing	12.5kHz in Analog, 1 channel of TDMA 6.25kHz equivalent in DMR
Frequency increment/channel step	VHF 2.5/3.125kHz (or multiples of), UHF 5/6.25kHz

#### Physical specifications

Dimensions (HxWxD)	Pelican case 1450 (available in Black, Orange, OD Green, Silver or Yellow) 420 x 331 x 174 mm
Weight	Less than 10kg (50.7lb), depending on the type of battery used
Operating temperature	22°F to +140°F (30°C to +50°C)

#### Power specifications

Power Supply	DC 10-30V (Supplied with AC/DC Mains supply charger (100-240V AC))
--------------	--

#### Battery specification

Internal battery	12V Panasonic 15Ah/12Ah SLA battery with built in charging capability (the charging works when external DC supply is connected). Recommend maximum temperature is 50C. 12V Lithium LiFePO4 batteries can also be used in the case reducing the weight
------------------	---

Standalone battery life When the power is set to max (5W VHF/ 4W UHF) and the duty cycle is 5/5/90, then the shift life may reach 60 hours

Battery assembly weight 4.3 Kg (9.5lb) will be less is Lithium battery used

#### Connectors

Antenna N type female (both Rx and Tx connected to duplexer)  
External DC input

#### Accessories

Supplied with the unit External AC/DC charger  
External DC Input Cable with Red and Black clamps (clips)  
Removable 12V SLA battery (fitted inside)

#### Spares

Not supplied with the unit 219-03353-00: CBL Battery Eliminator with 15A Fuse & Switch & ACC plug  
(Battery DC cable with car acc plug - cigarette lighter port)  
  
TA2700-03: KIT Spares x2 Battery Pack Transpb TA2700  
(Two spare batteries)  
  
TA3633-03 Dual Battery Transportable case  
(Case fitted with Two batteries and separate charging controller, can connect to a solar panel to charge batteries.

# TA3633 Transportable Repeater

## SPECIFICATIONS



### TRANSMITTER

Modulation types	4FSK,FM, C4FM
Audio response	+1/-3dB
FM hum and noise (Analog)	-40dB
Conducted spurious emissions	-36dBm
Output power	
VHF	Programmable 5W,3W,2W,1W
UHF	Programmable 4W,2.5W,2W,1W

### RECEIVER

Modulation types	4FSK,FM, C4FM
<b>P25 (TIA102)</b>	
Sensitivity	0.22 $\mu$ V (-120 dBm) @5%BER
Intermodulation response attenuation	75dB
Adjacent channel rejection	60dB
<b>DMR</b>	
Sensitivity ETS 300 113 @1%BER	-119dBm (0.25 $\mu$ V) @1%BER
Selectivity ETS 300 086	12.5kHz: 62 dB
Intermodulation response ETS 300-113	70dB
<b>Analog</b>	
Sensitivity	-120dBm (0.22 $\mu$ V)
Selectivity (EIA-603)	12.5kHz: 52dB
Intermodulation	75dB (VHF & UHF)

### TAIT NETWORK SOLUTIONS

Tait has taken every care in compiling this specification sheet, but we're always innovating and therefore changes to our models, designs, technical specification, visuals and other information included in this specification sheet could occur. For the most up-to-date information and for a copy of our terms and conditions please visit our website [www.taitradio.com](http://www.taitradio.com).

The words "Tait", "Tait Unified", "TeamPTT", the "Tait" logo and "Tait Unified" logo are trademarks of Tait International Limited

Tait International limited offices and facilities are certified for ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and ISO 45001:2018 (Occupational Health and Safety Management System) for aspects associated with the design, manufacture and distribution of radio communications and control equipment, systems and services. Tait Managed Services are certified for ISO 27001:2013 (Information Security Management System).

Authorized Partners