



AT COMMUNICATION INTERNATIONAL AG

HF EQUIPMENT. Military Catalogue

VERSION 1.0.06. MAY 2017

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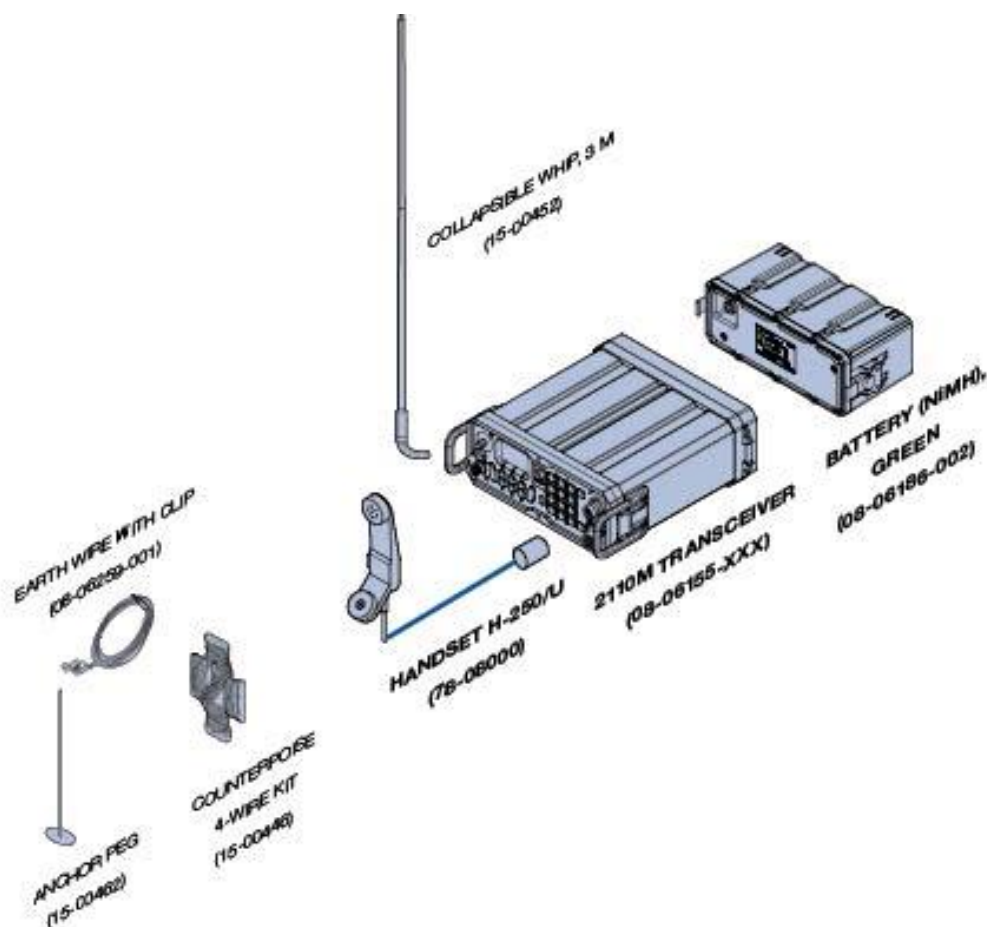
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2110M PORTABLE SYSTEM (#AT-2110M-000)

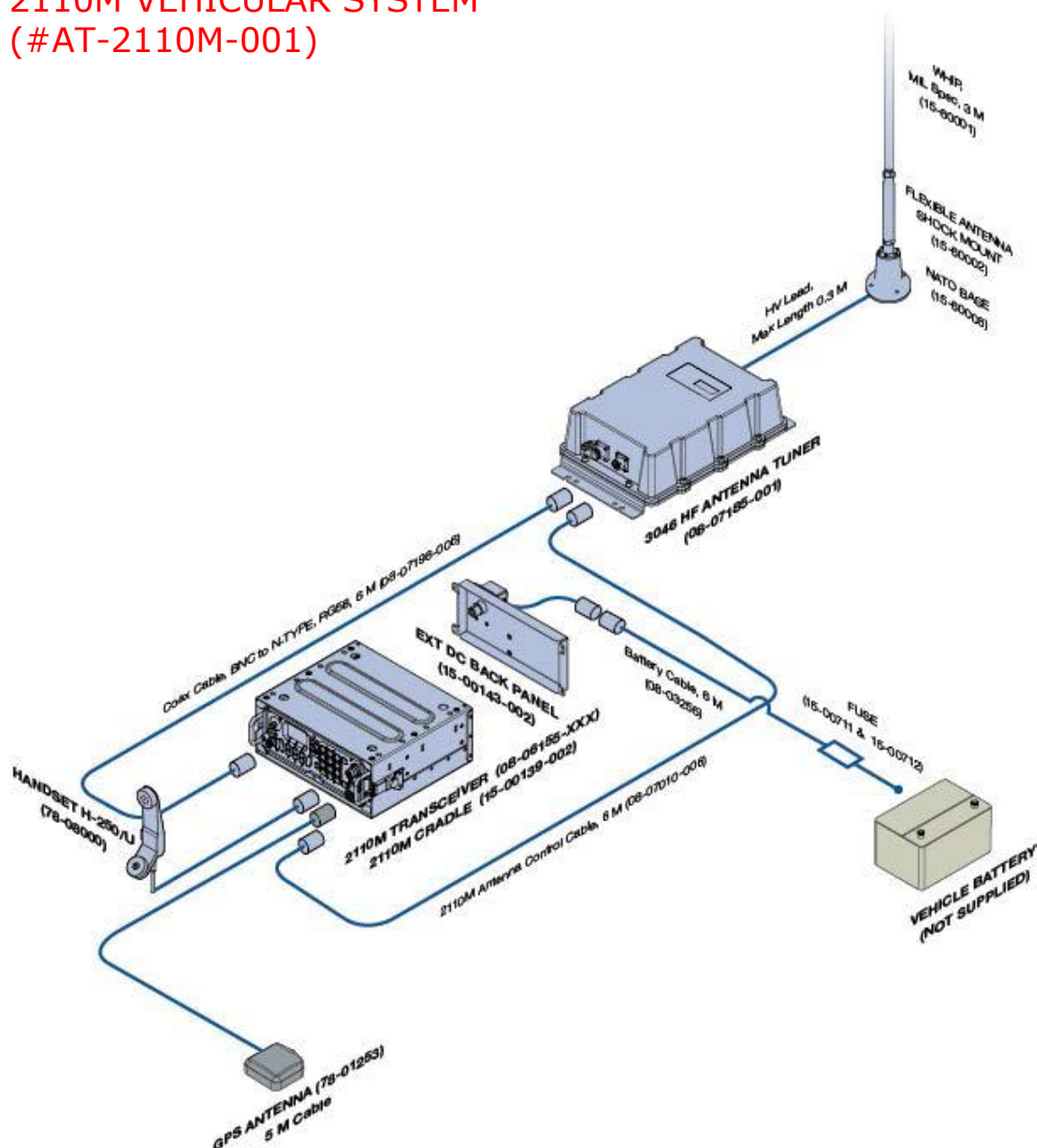


This package contains the key components for a 2110M Vehicular HF System. Up to 50 hours of use (using RX/TX at 9:1 ratio) is provided by the 13Ah rechargeable lightweight battery. The 3 m collapsible whip antenna, coupled with the internal 2110M Antenna Tuner provides continuous coverage from 1.6 to 30 MHz. The internal GPS receiver that is standard on the 2110M provides synchronization support for Frequency Hopping. Maximum RF power output for this system configuration is 25 W. Additional transceiver options and accessories can be selected to expand the capabilities of this configuration.

2110M Transceiver comprising:

2110M Transceiver (at choice)	AT-2110M-000-###
Frequency Hopping (If necessary)	AT-MIL-OPT-100
Handset H-250/U	AT-2110-ACS-100
Collapsible Whip	AT-2110-ANT-CW
Counterpoise 4-wire kit	AT-2110-ACS-114
Earth Wire with Clip	AT-2110-ANT-102
Anchor Peg	AT-2110-ANT-101
Battery (NiMH), Green	AT-2110-BAT-013-001
2110M Operator Guide	AT-2110M-ACS-101

2110M VEHICULAR SYSTEM (#AT-2110M-001)

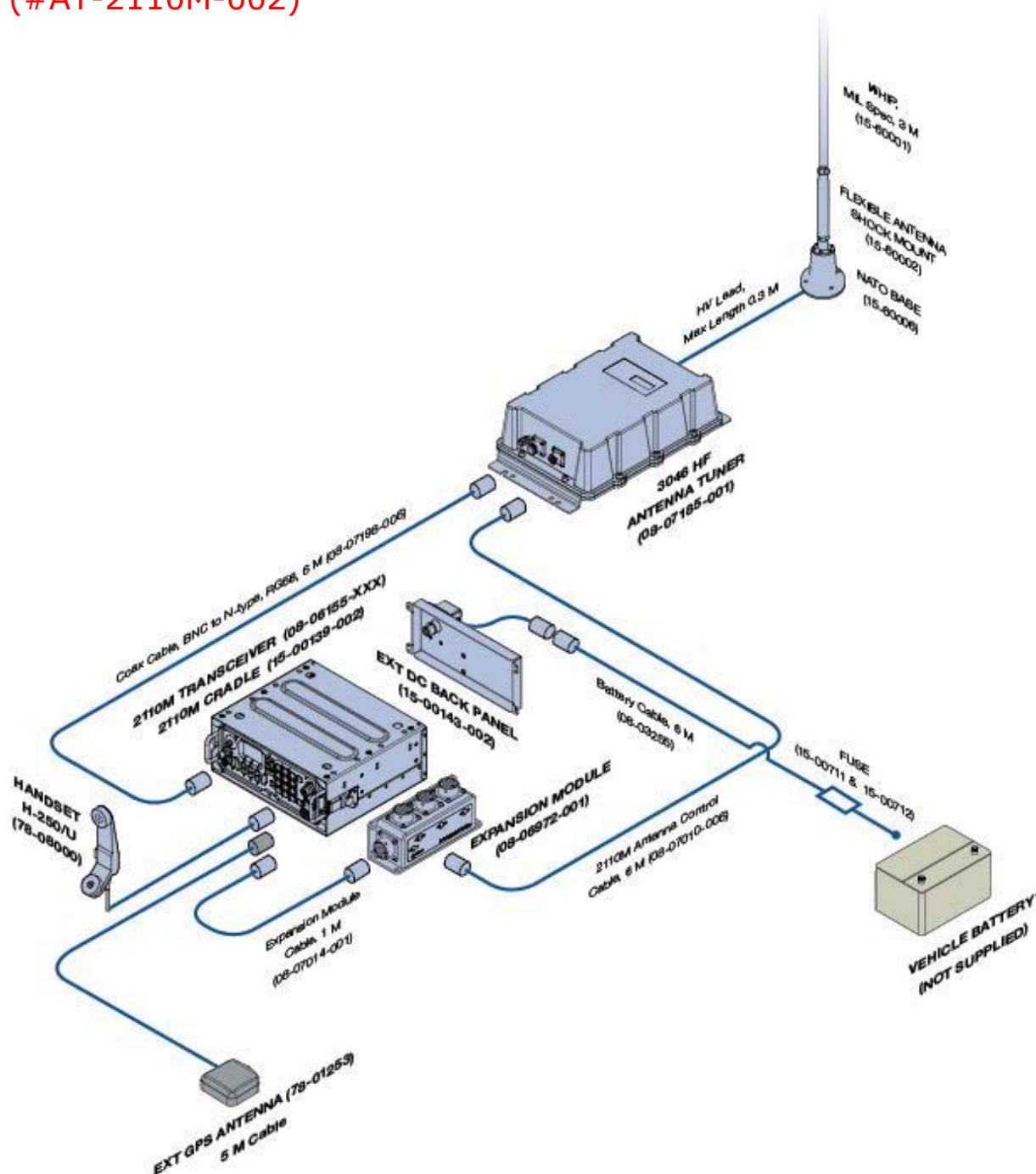


This package contains the key components for a 2110M Vehicular HF System. Power is provided by the 12 V DC vehicle battery however with the addition of an optional 24/12 V voltage converter the system is also able to run from a 24 V DC supply. The antenna system comprises the 3046 automatic tuner coupled with a 3 m composite whip antenna mounted to a NATO hole pattern compatible antenna base, providing continuous coverage from 2 to 30 MHz. An external GPS antenna is provided when this package is configured with a Frequency Hopping capable 2110M Transceiver. The external GPS antenna ensures reception of GPS signals for optimum Frequency Hopping performance and reliability in a vehicular environment. Maximum RF power output for this system configuration is 25 W. The 2110M Transceiver unit can be quickly and easily removed from the vehicle mounting cradle for "jerk and run" operational scenarios. Optional shock mounts are available for both the transceiver vehicle mounting cradle and 3046 HF Antenna Tuner. These provide added protection when equipment is installed in environments that may sustain extreme levels of shock/vibration.

2110M Vehicular System comprising:

2110M Transceiver (at choice)	AT-2110M-000-# # #
Frequency Hopping (If necessary)	AT-MIL-OPT-100
GPS Antenna (Frequency Hopping mode)	AT-2110-ACS-109
Handset H-250/U	AT-ACS-EX-102-002
2110M Antenna Control Cable	AT-2110-ANT-103
2110M Cradle	AT-2110M-ACS-102
External DC Back Panel	AT-2110M-ACS-103
Battery Cable	AT-ACS-101-001
32 A Fuse	AT-ACS-116
Fuse Holder	AT-ACS-115
Coax Cable, BNC to N-type, RG58	AT-MCC-100-006
3046 HF Antenna Tuner	AT-ANTM-3046-000-001
3046 Installation Kit	AT-MIL-ACS-101
NATO Base	AT-ANTM-3046-101
Whip, MIL Spec	AT-ANTM-3046-102
Flexible Antenna Shock Mount	AT-ANTM-3046-103
2110M Operator Guide	AT-2110M-ACS-101
3046 Installation Handbook	AT-ANTM-3046-100

2110M VEHICULAR SYSTEM 25 W (Extended) (#AT-2110M-002)

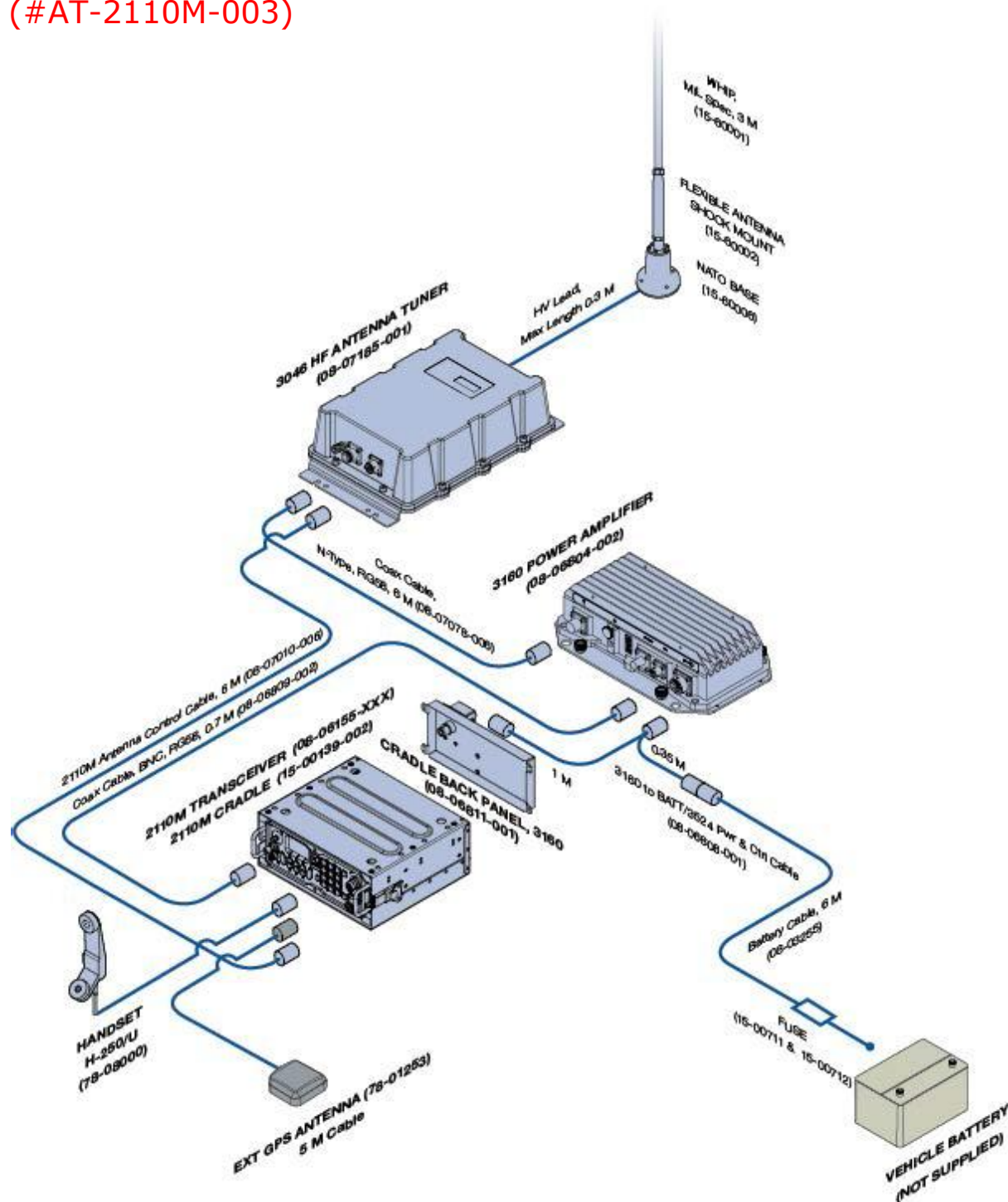


This package contains the key components for a 2110M Vehicular HF System. Power is provided by the 12 V DC Battery, and with the addition of a 24/12 V converter the system can run from a 24 V DC supply. The antenna system comprises the 3046 HF Antenna Tuner coupled with a 3 m composite whip antenna on a NATO base, and provides continuous coverage from 2 to 30 MHz. When this package is configured with a Frequency Hopping capable transceiver an external GPS antenna is provided to ensure optimum performance and reliability. Maximum RF power output for this system configuration is 25 W. The Expansion Module expands the 19-pin connector on the front panel of the 2110M into 3 extra ports to enable simultaneous connection of multiple accessories. More details can be found on page 34, 2110M Accessories. The 2110M Transceiver unit can be quickly and easily removed from the vehicle mounting cradle for "jerk and run" operational scenarios. Optional shock mounts are available for both the transceiver vehicle mounting cradle and 3046 HF Antenna Tuner for protection in extreme environments.

2110M Vehicular System 25 W (Extended) comprising:

2110M Transceiver (at choice)	AT-2110M-000-# # #
Frequency Hopping (If necessary)	AT-MIL-OPT-100
GPS Antenna (Frequency Hopping mode)	AT-2110-ACS-109
Handset H-250/U	AT-ACS-EX-102-002
2110M Antenna Control Cable	AT-2110-ANT-103
2110M Cradle	AT-2110M-ACS-102
External DC Back Panel	AT-2110M-ACS-103
Battery Cable	AT-ACS-101-001
32 A Fuse	AT-ACS-116
Fuse Holder	AT-ACS-115
Coax Cable, BNC to N-type, RG58	AT-MCC-100-006
Expansion Module	AT-ACSM-101
Expansion Module Interface Cable	AT-ACSM-102
3046 HF Antenna Tuner	AT-ANTM-3046-000-001
3046 Installation Kit	AT-MIL-ACS-101
NATO Base	AT-ANTM-3046-101
Whip, MIL Spec	AT-ANTM-3046-102
Flexible Antenna Shock Mount	AT-ANTM-3046-103
2110M Operator Guide	AT-2110M-ACS-101
3046 Installation Handbook	AT-ANTM-3046-100

2110M VEHICULAR SYSTEM 125 W (#AT-2110M-003)

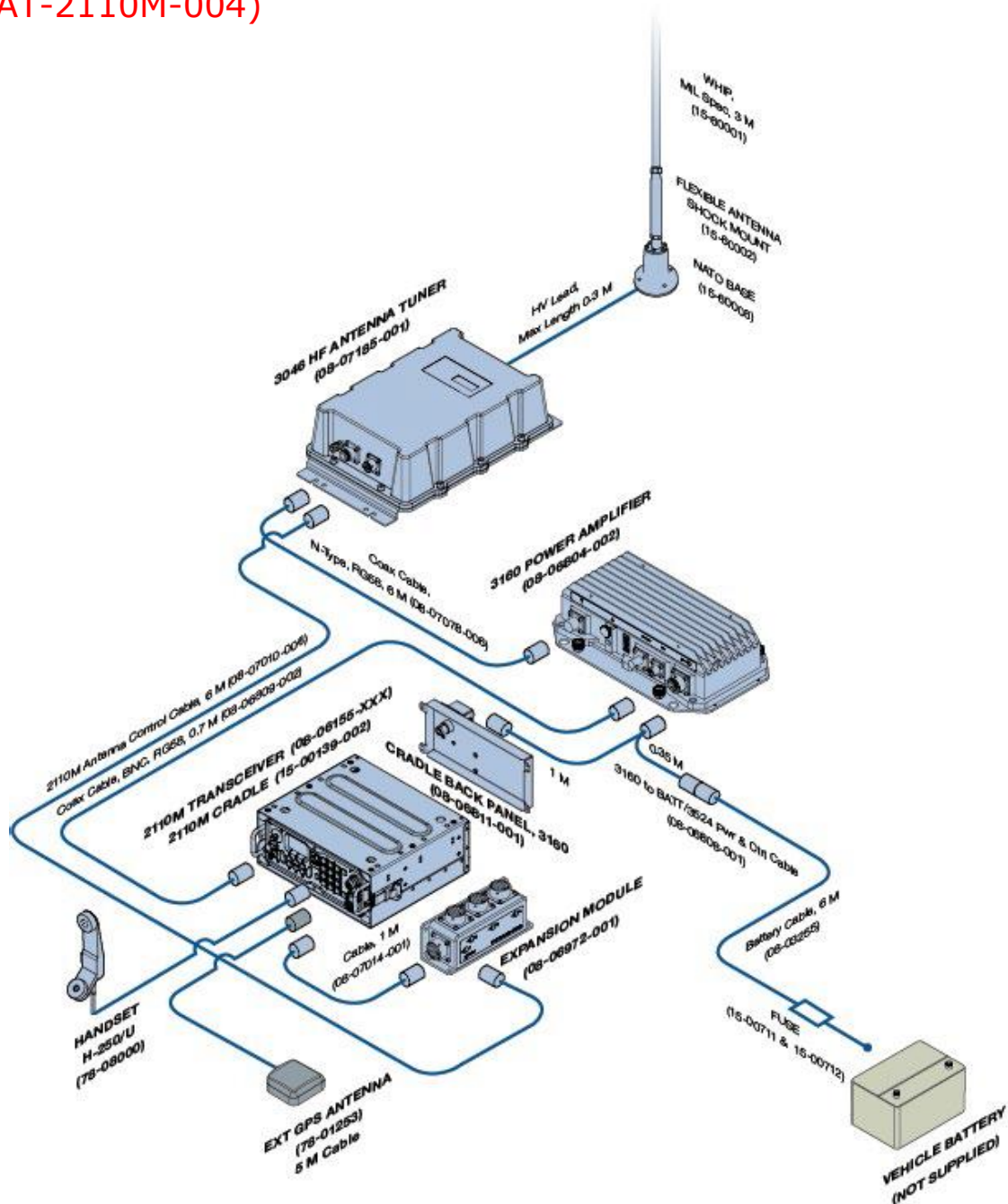


This package contains the key components for a 2110M Vehicular HF System. Power is provided by the 12 V DC vehicle battery and by adding a 24/12 V voltage converter the system can run from a 24 V DC supply. The 3160 Power Amplifier boosts the maximum RF power output to 125 W. The antenna system comprises the 3046 HF Antenna Tuner coupled with a 3 m composite whip antenna on a NATO base, and provides continuous coverage from 2 to 30 MHz. When this package is configured with a Frequency Hopping capable transceiver an external GPS antenna is provided to ensure optimum performance and reliability. The 2110M Transceiver unit can be quickly and easily removed from the vehicle mounting cradle for "jerk and run" operational scenarios. Optional shock mounts are available for the transceiver vehicle mounting cradle, 3160 Power Amplifier, and 3046 HF Antenna Tuner for protection in extreme environments.

2110M Vehicular System 125 W comprising:

2110M Transceiver (at choice)	AT-2110M-000-###
Frequency Hopping (If necessary)	AT-MIL-OPT-100
GPS Antenna (Frequency Hopping mode)	AT-2110-ACS-109
Handset H-250/U	AT-ACS-EX-102-002
2110M Cradle	AT-2110M-ACS-102
Cradle Back Panel, 3160	AT-3160-ACS-101
3160 Power Amplifier	AT-3160-101
3160 Installation Kit	AT-MIL-ACS-101
3160 to BATT/3524 Pwr & Ctrl Cable	AT-3160-ACS-107
Coax Cable, BNC, RG58	AT-CCM-101-001
2110M Antenna Control Cable	AT-2110-ANT-103
Coax Cable, N-type, RG58	AT-CCM-101-006
Battery Cable	AT-ACS-101-001
32 A Fuse	AT-ACS-116
Fuse Holder	AT-ACS-115
3046 HF Antenna Tuner	AT-ANTM-3046-000-001
3046 Installation Kit	AT-MIL-ACS-101
NATO Base	AT-ANTM-3046-101
Whip, MIL Spec	AT-ANTM-3046-102
Flexible Antenna Shock Mount	AT-ANTM-3046-103
2110M Operator Guide	AT-2110M-ACS-101
3160 PA Installation Handbook	AT-3160-ACS-105
3046 Installation Handbook	AT-ANTM-3046-100

2110M VEHICULAR SYSTEM 125 W (EXTENDED) (#AT-2110M-004)

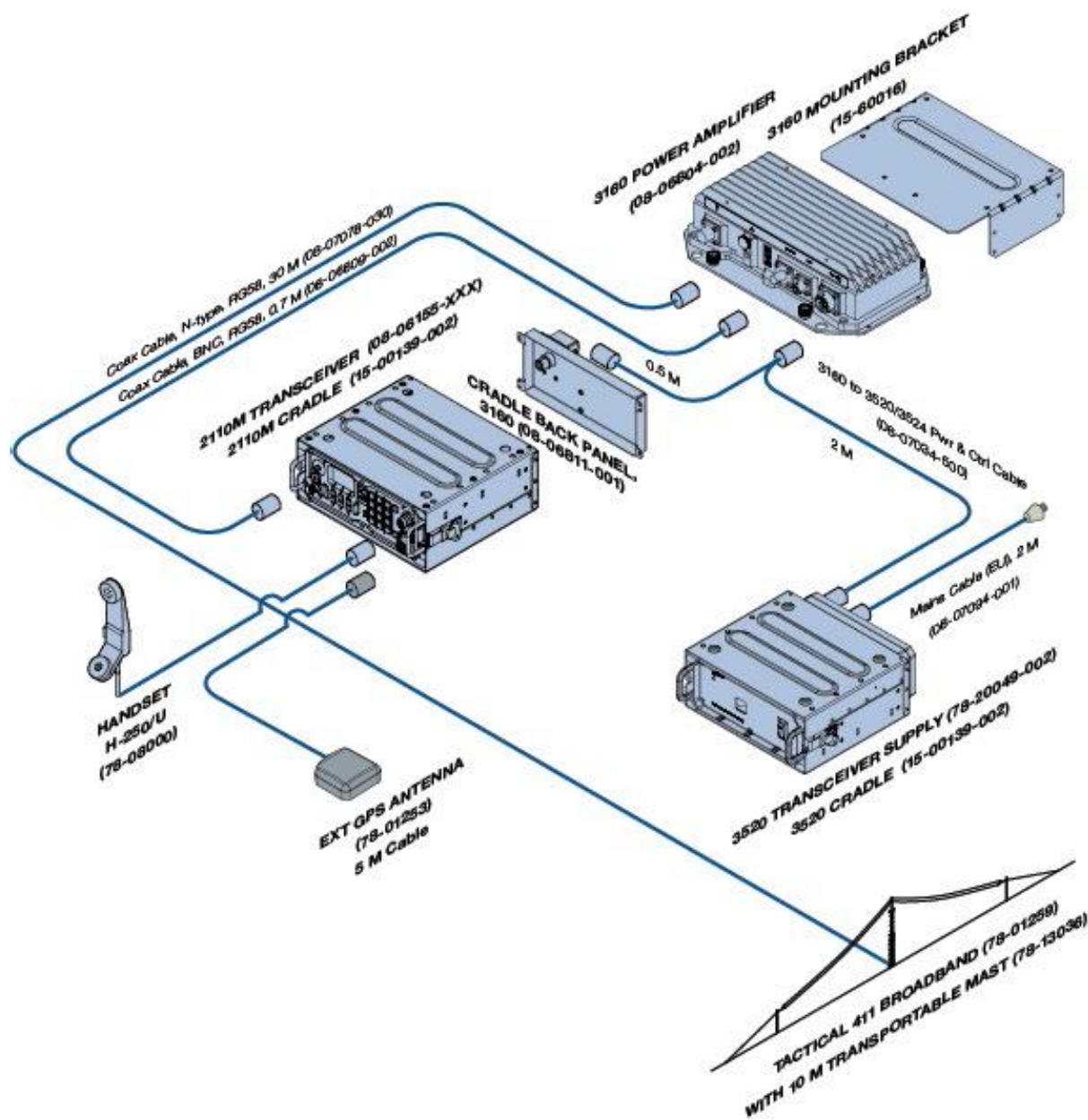


This package contains the key components for a 2110M vehicular HF system with added expansion capability. Power is provided by the 12 V DC vehicle battery and by adding a 24/12 V voltage converter the system can run from a 24 V DC supply. The 3160 Power Amplifier boosts the maximum RF power output to 125 watts. The antenna system comprises the 3046 HF Antenna Tuner coupled with a 3 m composite whip antenna on a NATO base, and provides continuous coverage from 2 to 30 MHz. When this package is configured with a Frequency Hopping capable transceiver an external GPS antenna is provided to ensure optimum performance and reliability. The Expansion Module expands the 19-pin connector on the front panel of the 2110M into 3 extra ports to enable simultaneous connections of multiple accessories. More details can be found on page 34, 2110M Accessories. The 2110M Transceiver unit can be quickly and easily removed from the vehicle mounting cradle for "jerk and run" operational scenarios. Optional shock mounts are available for the transceiver vehicle mounting cradle, 3160 Power Amplifier, and 3046 HF Antenna Tuner for protection in extreme environments.

2110M Vehicular System 125 W (Extended) comprising:

2110M Transceiver (at choice)	AT-2110M-000-###
Frequency Hopping (optionally)	AT-MIL-OPT-100
GPS Antenna (w. Frequency Hopping Mode)	AT-2110-ACS-109
Handset H-250/U	AT-ACS-EX-102-002
2110M Cradle	AT-2110M-ACS-102
Cradle Back Panel, 3160	AT-3160-ACS-101
3160 Power Amplifier	AT-3160-101
3160 Installation Kit	AT-MIL-ACS-101
3160 to BATT/3524 Pwr & Ctrl Cable	AT-3160-ACS-107
Coax Cable, BNC, RG58	AT-CCM-101-001
2110M Antenna Control Cable	AT-2110-ANT-103
Coax Cable, N-type, RG58	AT-CCM-101-006
Expansion Module	AT-ACSM-101
Expansion Module Interface Cable	AT-ACSM-102
Battery Cable	AT-ACS-101-001
32 A Fuse	AT-ACS-116
Fuse Holder	AT-ACS-115
3046 HF Antenna Tuner	AT-ANTM-3046-000-001
3046 Installation Kit	AT-MIL-ACS-101
NATO Base	AT-ANTM-3046-101
Whip, MIL Spec	AT-ANTM-3046-102
Flexible Antenna Shock Mount	AT-ANTM-3046-103
2110M Operator Guide	AT-2110M-ACS-101
3160 PA Installation Handbook	AT-3160-ACS-105
3046 Installation Handbook	AT-ANTM-3046-100

2110M BASE STATION SYSTEM 125 W (#AT-2110M-005)



This package contains the key components for a 2110M Base HF system with added expansion capability. Power is provided by the 3520 AC Mains power supply. The antenna system comprises the tactical 411 broadband dipole antenna, together with a rugged 10 m transportable mast, providing continuous coverage from 2 to 30 MHz. An external GPS antenna is provided when this package is configured with a Frequency Hopping capable 2110M Transceiver. The external GPS antenna ensures reception of GPS signals for optimum Frequency Hopping performance and reliability in a indoor base environment. The 3160 Power Amplifier boosts the maximum RF power output for this system configuration to 125 W. The Expansion Module expands the 19-pin connector on the front panel of the 2110M into 3 extra ports. This enables simultaneous connection of multiple accessories such as a Data Terminal, Crosspatch, PC access for transceiver profile and secure key programming etc.

2110M TRANSCEIVERS

2110M Base Station System 125 W comprising:

2110M Transceiver (at choice)	AT-2110M-000-###
Frequency Hopping (optionally)	AT-MIL-OPT-100
GPS Antenna (with Frequency Hopping)	AT-2110-ACS-109
Handset H-250/U	AT-ACS-EX-102-002
2110M Cradle	AT-2110M-ACS-102
Cradle Back Panel, 3160	AT-3160-ACS-101
3160 Power Amplifier	AT-3160-101
3160 Mounting Bracket	AT-3160-ACS-100
3160 to 3520/3524 Pwr & Ctrl Cable	AT-3160-ACS-108
Coax Cable, BNC, RG58	AT-CCM-101-001
Coax Cable, N-type, RG58	AT-CCM-101-030
Mains Cable (EU)	AT-PS-3520-003
Tactical Broadband Antenna (2-30MHz, 125 W)	AT-ANT-BBA-120
Transportable Mast	AT-2110M-MST
3520 Transceiver Supply	AT-PS-3520-001
3520 Cradle	AT-2110M-ACS-102
2110M Operator Guide	AT-2110M-ACS-101
3160 PA Installation Handbook	AT-3160-ACS-105
3520 User Guide	AT-PS-3520-004

2110M TRANSCEIVERS

2110M MANPACK TRANSCEIVERS

The 2110M Transceiver meets the most demanding mission and user requirements with optional Frequency Hopping capability and optional voice encryption for secure communications. Interoperability with other military transceivers is achieved through advanced FED-STD or MIL-STD ALE. It also features up to 65 hours battery life per charge providing greater durability and a lighter carrying weight required for long duration tactical operations.



2110M Transceiver
Green, Frequency Hopping
Capable
(AT-2110M-000-001)



2110M Transceiver
Green, Non-Frequency
Hopping
(AT-2110M-000-002)



2110M Transceiver
Black, Frequency Hopping
Capable
(AT-2110M-000-003)

Standard features:

FED-STD-1045 ALE/CALM

1.6–30 MHz, 400 channels, 10 networks

25/5 W (PEP)

12 V DC, USB/LSB/AM

±0.5 ppm frequency stability

Internal automatic antenna tuner

Multi-net scanning

In-built Easitalk speech noise reduction

Comprehensive calling capabilities, including Selective call, ALL call, Emergency call, Message call, Phone call, Remote Diagnostics

Call logging

Battery management and up to 65 hours use on a single charge

Front panel programming

19-way external expansion connector for data terminal, crosspatch, etc

Computer interface (RS232) for PC control and programming

Extensive Built-In-Test functions

Meets MIL-STD-810F for shock, vibration, immersion, salt fog and dust

2110M Manpack Options:

Frequency Hopping	AT-MIL-OPT-100
MIL-STD-188-141B ALE Upgrade	AT-MIL-OPT-105
GPS Calling Enable	AT-NSR-103
CIVS Voice Scrambler	AT-OPT-102
Amateur Mode	AT-OPT-101
TXD, Tx Program Disable	AT-OPT-103
Upgrade, AES-256 Encryption	AT-2110-106
Upgrade, 1200 bit/s Vocoder	AT-EX-112
500 Hz Filter (Factory Fit)	AT-2110-102
2.7 kHz BW Filter (Factory Fit)	AT-2110-103
CES-128 Voice Encryptor (Factory Fit)	AT-2110-107
AES-256 Voice Encryptor (Factory Fit)	AT-2110-108
MIL-STANAG 2G Data (Factory Fit)	AT-MIL-OPT-101
MIL-STANAG 2G Data and Digital Voice (Factory Fit)	AT-MIL-OPT-102
Digital Voice (Factory Fit)	AT-MIL-OPT-103
S4538 3G ALE (Factory Fit)	AT-2110-105
S4538 3G ALE and Digital Voice (Factory Fit)	AT-MIL-OPT-104

2110M BATTERIES

Battery Pack, 12 V 8Ah (NiMH)

(#AT-2110M-BAT-008) – for black quote

(#AT-2110M-BAT-108) – for green quote



Waterproof battery pack with 12 V, 8Ah rechargeable Nickel Metal Hydride battery and battery management controller.

Recharges: ~500 (Retaining at least 80% capacity)
Useable hours: ~30 hrs (using Rx/Tx 9:1)

Battery Pack, 12 V 13Ah (NiMH)

(#AT-2110M-BAT-013) – for black quote

(#AT-2110M-BAT-113) – for green quote



Waterproof battery pack with 12 V, 13Ah rechargeable Nickel Metal Hydride battery and battery management controller.

Recharges: ~500 (Retaining at least 80% capacity)
Useable hours: ~50 hrs (using Rx/Tx 9:1).

Battery Pack, 12 V 17Ah (LiFePO₄)

(#AT-2110M-BAT-017) – for black quote

(#AT-2110M-BAT-117) – for green quote



Waterproof battery pack with 12 V, 17 Ah rechargeable battery and battery management controller. Uses lithium iron phosphate chemistry that is safe and has excellent shelf life.

Recharges: ~2000 (retaining at least 80% capacity)
Useable hours: ~65 hrs (using Rx/Tx 9:1 ratio)

Battery Pack, 12 V 7Ah SLA

(#AT-2110M-BAT-007)



Waterproof battery pack with 12 V, 7Ah rechargeable Sealed Lead Acid battery and battery management controller.

Recharges: ~200 (Retaining at least 60% capacity)
Useable hours: ~15 hrs (using Rx/Tx 9:1)

2110M CHARGERS

3523 Battery Charger 3 A AC to DC (#AT-3523-000)



Charges the battery directly and 3x faster than the low noise 3522 DC Battery Charger. Does not support charging via the front panel. 3523 recommended when using the Manpack with spare batteries enabling power to the transceiver while the other is being recharged.

Note:

AC mains input cables and DC output cables need to be ordered separately

3523 Battery Charger Accessories.

Cable, Mains, MIL

- EU
- US
- UK
- AU

AT-3523-100-001
AT-3523-100-002
AT-3523-100-003
AT-3523-100-004

Cable, 3523 DC Output, 6-way

AT-3523-101

3522 Battery Charger 1 A DC to DC (#AT-3522-000)



The low noise 3522 DC Battery Charger enables charging of batteries from a 12 V to 60 V DC source. With the use of detachable leads, the operator has the option of charging the battery via the transceiver's front panel or by direct connection to the battery. The front panel connection enables charging while operating the transceiver.

Note:

DC input cables and DC output cables need to be ordered separately

3522 Battery Charger Accessories.

Cable, 3522 DC Input, Cigarette Lighter

AT-3522-100

Cable, 3522 DC Input, Alligator Clips

AT-3522-101

Cable, 3522 DC Output, 6-way

AT-3522-102

Cable, 3522 DC Output, 19-way

AT-3522-103

2110M MANPACK ACCESSORIES

2110M Hand-Powered Battery Charger (#AT-2110-PC-HP)



A portable hand-powered battery charger that is compact and lightweight, and encased in a robust and waterproof aluminium housing. The charger comes with easy to use accessories for simple operation, and a convenient carrying case.

2110M Solar Battery Charger (#AT-2110-PC-SOL-002)



A portable solar-powered 20 W battery charger that uses solid state, thin fi lm solar technology to meet your mobile power needs. It is lightweight, weatherproof and UV resistant, and durable with a tough rip-stop nylon backing. Camo Pattern

Hand-Power Battery Charger & Solar Battery Charger Accessories:

Cable, Output, 2-pin Molex to 19-way	AT-2110-PC-101
Cable, Output, 2-pin Molex to 6-way	AT-2110-PC-103

2110M MANPACK ACCESSORIES

Handset H-250/U	AT-2110-ACS-100
Bone Conduction Headset with PTT	AT-2110M-ACS-101
Lightweight Headset with PTT	AT-2110M-ACS-102
Morse Key, Desktop	AT-2110-ACS-106
Morse Key, Leg Mount	AT-2110-ACS-107
External GPS Antenna	AT-2110-ACS-109

2110M Cradle Accessories:

Vehicle Mounting Cradle, 2110M with Screws	AT-2110M-ACS-102
Cradle Back Panel, 3160	AT-2110-ACS-114
External DC Back Panel	AT-2110-ACS-114
Vehicle Shock Mount	AT-2110-ACS-114

Backpack, External Frame (#AT-2110-BP-001)



Heavy duty design with adjustable, semi-flexible external frame and ergonomic shoulder harness for comfort (allows for additional loads up to 50 kg). Made from 1000 Denier bulked filament nylon and co-polymer frame.

Expansion Module (#AT-ACSM-101)



The Expansion Module provides up to 3 connection points for external accessories to the 2110M Transceiver. The Expansion Module is provided complete with fasteners enabling mounting of the unit to the sides or top of the 2110M Transceiver cradle

Note:

The interface cable below that is required to connect the Expansion Module to the 2110M Transceiver must be ordered separately.

Simultaneous connection of some combinations of accessories may not be supported. Please contact your AT Communication for advice if multiple connections via the Expansion Module is required

Expansion Module Accessories:

Expansion Module Interface Cable, 1 m

AT-ACSM-102

2110M MANPACK ANTENNAS

Long Wire and Adaptor, 1.6–30 MHz (#AT-2110-ANT-LW)



Made from lightweight Kevlar and includes throw rope, antenna adaptor, winding spool, anchor peg and antenna deployment quick reference card.

End-fed Broadband, 3–30 MHz (#AT-2110-ANT-EF)



Made from lightweight Kevlar and includes 3 m coaxial feeding cable terminated with BNC connectors, broadband antenna balun, throw rope, counterpoise kit, winding spool, anchor peg and antenna deployment quick reference card

Broadband Dipole, 3–30 MHz (#AT-2110-ANT-BBD)



Made from lightweight Kevlar and includes 10 m coaxial feeding cable terminated with BNC connectors, broadband antenna balun, two lots of termination resistors, throw rope, counterpoise kits, winding spool, anchor pegs and antenna deployment quick reference card.

Wire Dipole, 3–30 MHz (#AT-2110-ANT-WD)



Made from lightweight Kevlar and includes 10 m coaxial feeding cable terminated with BNC connectors, dipole antenna balun, throw rope, antenna adaptor, winding spools, anchor peg and antenna deployment quick reference card.

Dipole and Broadband Kit, 2–30 MHz (#AT-2110-ANT-DBK)



Made from lightweight Kevlar and includes 10 m coaxial feeding cable terminated with BNC connectors, broadband antenna balun, two lots of termination resistors, throw ropes, counterpoise kits, winding spools, anchor pegs, and antenna deployment quick reference cards.

Collapsible Whip, 2.8m
(#AT-2110-ANT-CW)



Lightweight 6-section whip with flexible gooseneck
Frequency Rate: 2-30 MHz

Tape Whip, 1.5 m
(#AT-2110-ANT-TW)



Foldable tape whip antenna with flexible gooseneck
Frequency Rate: 2-30 MHz

Knock Over Whip, 1.5 m
(#AT-2110-ANT-KOW)



Lightweight collapsible 3 section knock over whip antenna with flexible gooseneck
Frequency Rate: 2-30 MHz

2110M EARTHING

Counterpoise 4-wire Kit	AT-2110-ACS-114
Anchor Peg	AT-2110-ANT-101
Earth Wire with Clip	AT-2110-ACS-113

HF Tactical Broadband Antenna AT SWQ-150M (#AT-ANT-SWQ-150)



The AT SWQ-150M Tactical, Broad-band Antenna is a portable, HF broadband antenna designed specifically for mobile and portable HF communication where rapid deployment and simplicity of operation is essential.

It can also be installed as a semi-permanent base station antenna.

The antenna is supplied with Mil. Spec cable and connectors. Component case is of rugged die-cast aluminium and the earth stake is of stainless steel with heavy-duty 0.315" (8mm) shaft. A 50' (15m) throw line and 16' (5m) ancillary line, of high quality braided nylon cord are included.

Standard features:

Operating Frequency 2-30 MHz

Input Impedance 50 Ohm

Input Power 150 watts SSB PEP

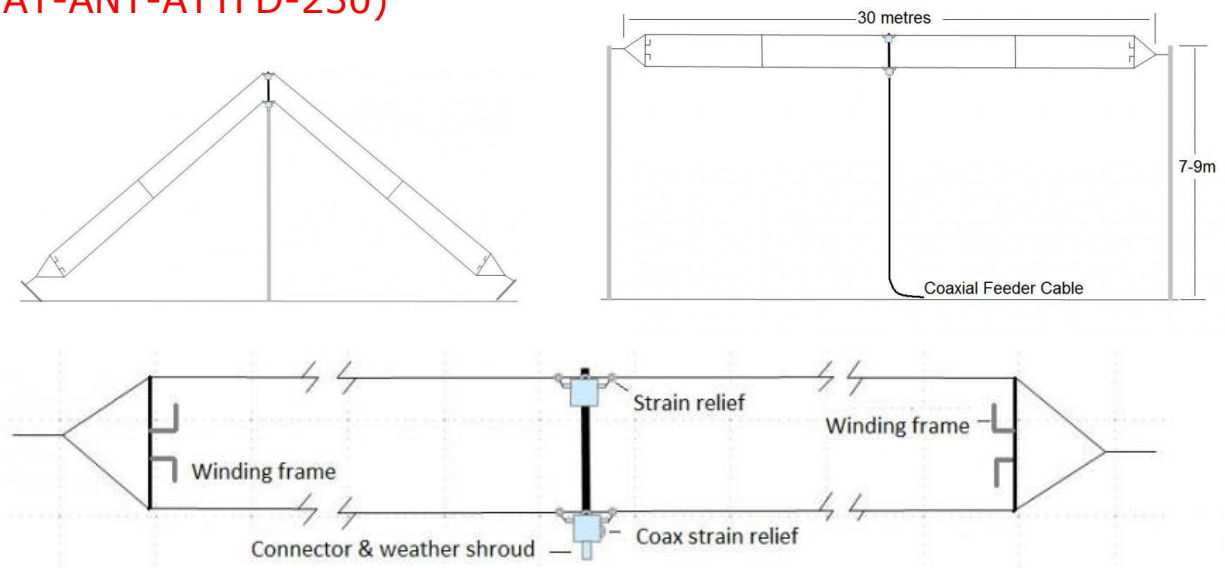
VSWR: Typically better than 2:1 across the band

Supplied with 5 metres of coax fitted with N, UHF or BNC plug.
(Specify option required when ordering)

Packed Weight: 1.3 kg

Packed Size: (254mm x 127mm x 76mm)

HF Tactical Broadband Dipole ATT FD 230 **(#AT-ANT-ATTFD-230)**



The ATT FD 230, 2-wire Tactical Broadband Dipole Antenna is a folded dipole antenna which covers the frequency range 2 to 30MHz.

It is supplied in a carry bag which includes balun and load, antenna elements, spreaders and end anchor stakes.

No external antenna tuner is required.

The antenna can be installed horizontally for long range communication, or as an inverted V on a single central mast for short range NVIS communication.

Standard features:

Frequency range: 2 to 30 MHz (No tuner required)

Input Impedance: 50 Ohms Unbalanced

Power Rating: 400 watts PEP

VSWR: Maximum 2.5:1 across the band (subject to ground conditions)

Polarisation: Horizontal

Input Connector: BNC, UHF or N type, or other to be specified

Deployed length: 30m when deployed horizontally

Packed Weight: 5 kg

Wind Rating: 55m/sec, (no ice loading)

Temperature Range: -55°C to +71°C

ANTENNA MASTS

Mast, Man-portable 6 m Tactical (#AT-2110-MST)



Lightweight, compact man-portable mast system. The kit includes multi-section mast, guy ropes, guy stakes, halyard, base plate stakes and installation instructions. This mast is most suitable for use with lightweight, low power (25 W) antennas used with the 2110 series Manpack Transceiver.

Note:

The 6 m mast is not suitable for use with full size 125 W / 1 kW Broadband Antennas

Certain Manpack Transceiver antennas may require more than one mast. Please check specific mast requirements for each antenna before building your system

Mast, Transportable 10 m (#AT-2110M-MST)



Lightweight, compact vehicle transportable mast system. The kit includes, multi-section mast, guy ropes (2 sets), guy stakes, halyard, base plate stakes and installation instructions. This mast can be used with many antenna types however it is most suitable for use with lightweight, standard power (125 W) broadband antennas.

3160 POWER AMPLIFIER (#AT-3160-101)



The 3160 auxiliary Power Amplifier (PA) boosts the RF output power of the Codan 2110M Transceiver from 25 to 125 W. The Amplifier is suitable for both vehicular and base station configurations, and provides full duty cycle operation for all modes, including voice, data and Frequency Hopping. Fan recommended for high dutycycle usage e.g. Data.

Standard features:

125 W PEP average output power

12 V DC nominal supply voltage

Fully protected against all load conditions

Meets MIL-STD-810F for shock, vibration, immersion and dust

Note:

For operation in vehicles with 24/26 V systems, AT Communication recommends using the 20A voltage regulator (part number AT-3524-001)

3160 Accessories:

Mounting Bracket, 3160 <i>NOTE: It is not recommended to mount the 3160 to the 2110M mounting cradle in vehicular environments.</i>	AT-3160-ACS-100
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Cradle Back Panel, 3160	AT-3160-ACS-101
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Shock Mount	AT-3160-ACS-102
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Fan Unit <i>NOTE: Recommended with systems using the 3160 PA for data applications.</i>	AT-3160-ACS-103
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3160 Installation Kit <i>Kit containing a selection of fasteners for mounting the 3160 Power Amplifier.</i>	AT-MIL-ACS-101
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Installation Handbook, 3160 Power Amplifier	AT-3160-ACS-105
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3160 Accessories — Cables for separated 3160 and 2110M:

Cable, Coax Assembly, BNC-BNC Type Connectors, RG58, 2.5 m
Connects 2110M RF output to 3160 PA input; this length is used when units are installed separately.

AT-CCM-101-002

Cable, 3160 to 3520/3524 Power & Control, 2 m
This cable allows up to 2 m cable length between 3160 PA and back panel of 2110M cradle, and up to 2 m from 3160 PA and 3520 Transceiver Supply or 3524 DC converter. Requires fitment of Cradle Back Panel (part number AT-3160-ACS-101) to transceiver cradle.

AT-3160-ACS-106

Cable, 3160 to BATT/3524 Power & Control, 1 m
This cable allows up to 1 m cable length between the 3160 PA and back panel of 2110M cradle fitted with the cradle back panel (part number AT-3160-ACS-101). DC power can be provided from a 12 V battery using the Battery cable (part number AT-ACS-101-001) or from a 3520/3524 using the cable (part number AT-NMR-ACS-102).

AT-3160-ACS-107

3160 Accessories — Cables for co-sited 3160 and 2110M:

Cable, Coax Assembly, BNC-BNC Type Connectors, RG58, 0.7 m
Connects 2110M Transceiver RF output to 3160 PA input; this length is used when units are co-sited.

AT-CCM-101-001

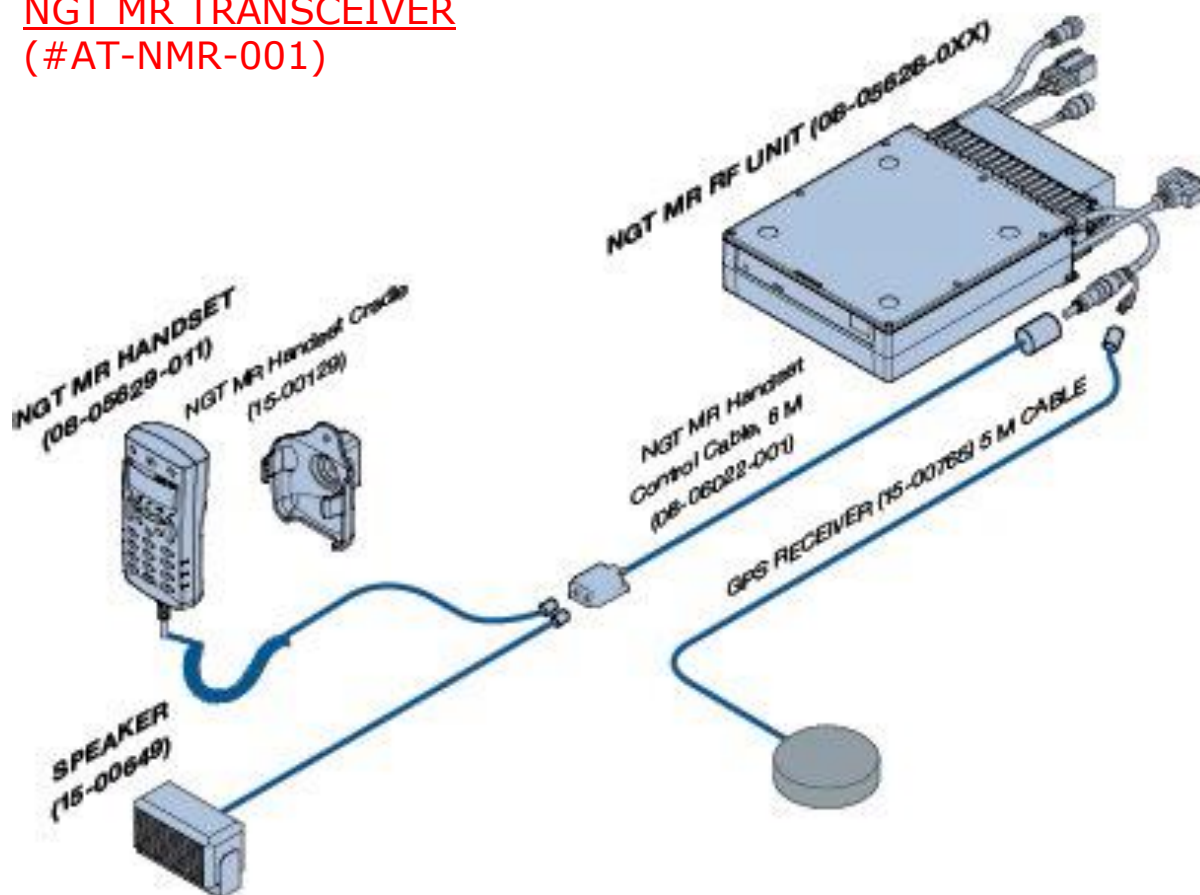
Cable, 3160 to 3520/3524 Power & Control, 0.5 m
This cable allows up to 0.5 m cable length between 3160 PA and back panel of 2110M cradle fitted with the cradle back panel (part number AT-3160-ACS-101). DC power can be provided from a 12 V battery using the battery cable (part number AT-ACS-101-001) or from a 3520/3524 using the cable (part number AT-NMR-ACS-102).

AT-3160-ACS-108

Cable, 3160 to BATT/3524 Power & Control, 0.5 m
This cable allows up to 0.5 m cable length between the 3160 PA and back panel of 2110M cradle fitted with the cradle back panel (part number AT-3160-ACS-101). DC power can be provided from a 12 V battery using the battery cable (part number AT-ACS-101-001) or from a 3520/3524 using cable (part number AT-NMR-ACS-102).

AT-3160-ACS-109

NGT MR TRANSCEIVER (#AT-NMR-001)

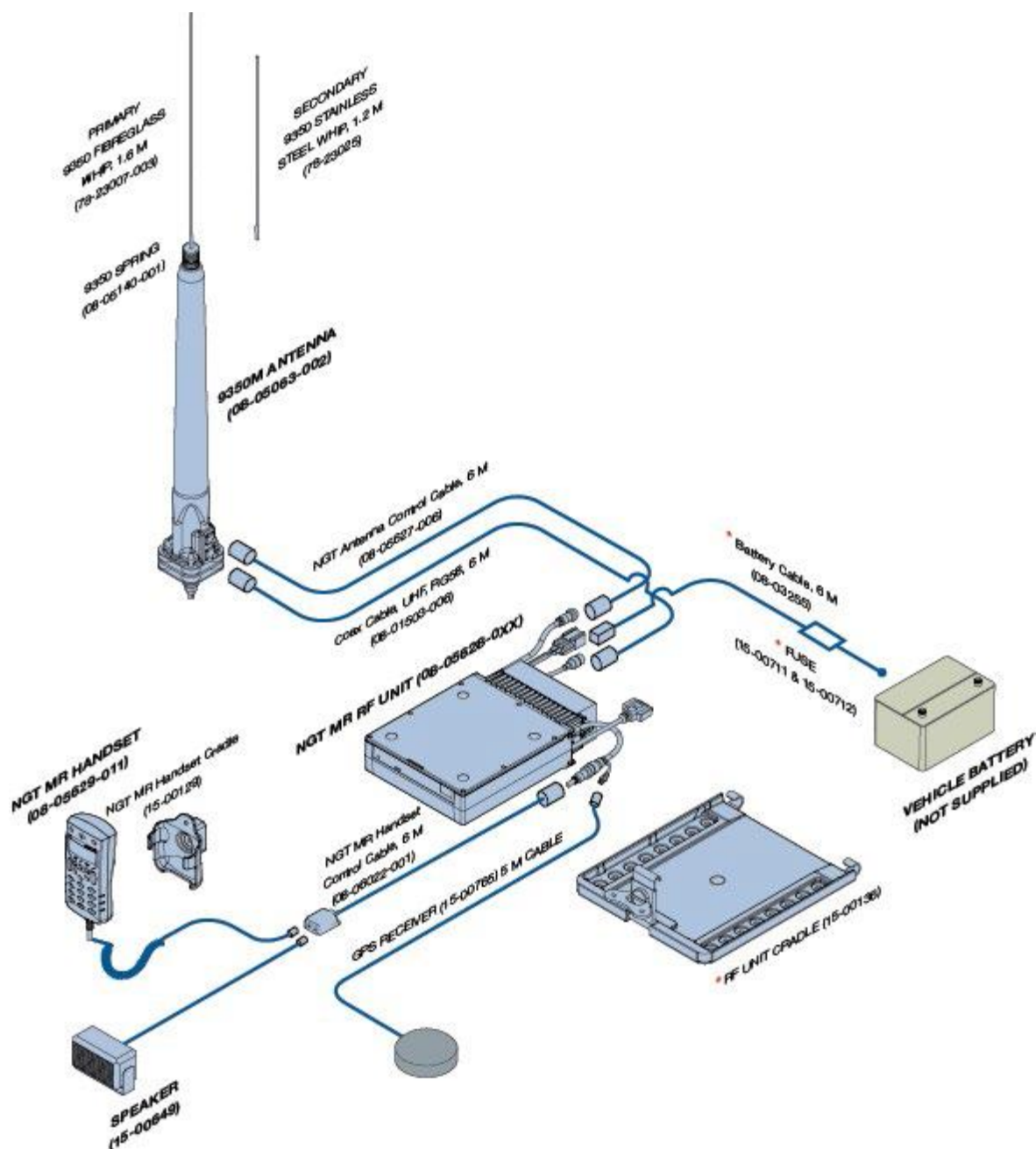


This package contains the key components required for a basic NGT MR Transceiver system. The main RF Unit is controlled via the MR Handset via the 6 m Handset control cable which also provides a connection point for the Speaker. A GPS receiver accessory is provided as part of the package when a Frequency Hopping capable variant of the MR RF Unit is selected. The NGT MR Transceiver is designed to operate from a 12 V DC source. Maximum RF power output from this system is 125 W.

NGT MR Basic Comprising:

NGT MR RF Unit	AT-NMR-000-###
Frequency Hopping (optionally)	AT-MIL-OPT-100
GPS Receiver (with Frequency Hopping)	AT-ACS-EX-110
NGT MR Handset	AT-NMR-ACS-101
NGT MR Handset Cradle	AT-ACS-NSR-107
NGT MR Handset Control Cable	AT-ACS-EX-102-006
Speaker	AT-ACS-117
Self Adhesive Rubber Feet (x4)	AT-ACS-119
Earth Wire	AT-ACS-120
NGT MR Operator Guide:	
- Russian	AT-NMR-ACS-103-001
- English	AT-NMR-ACS-103-002

NGT MR VEHICLE (#AT-NMR-002)

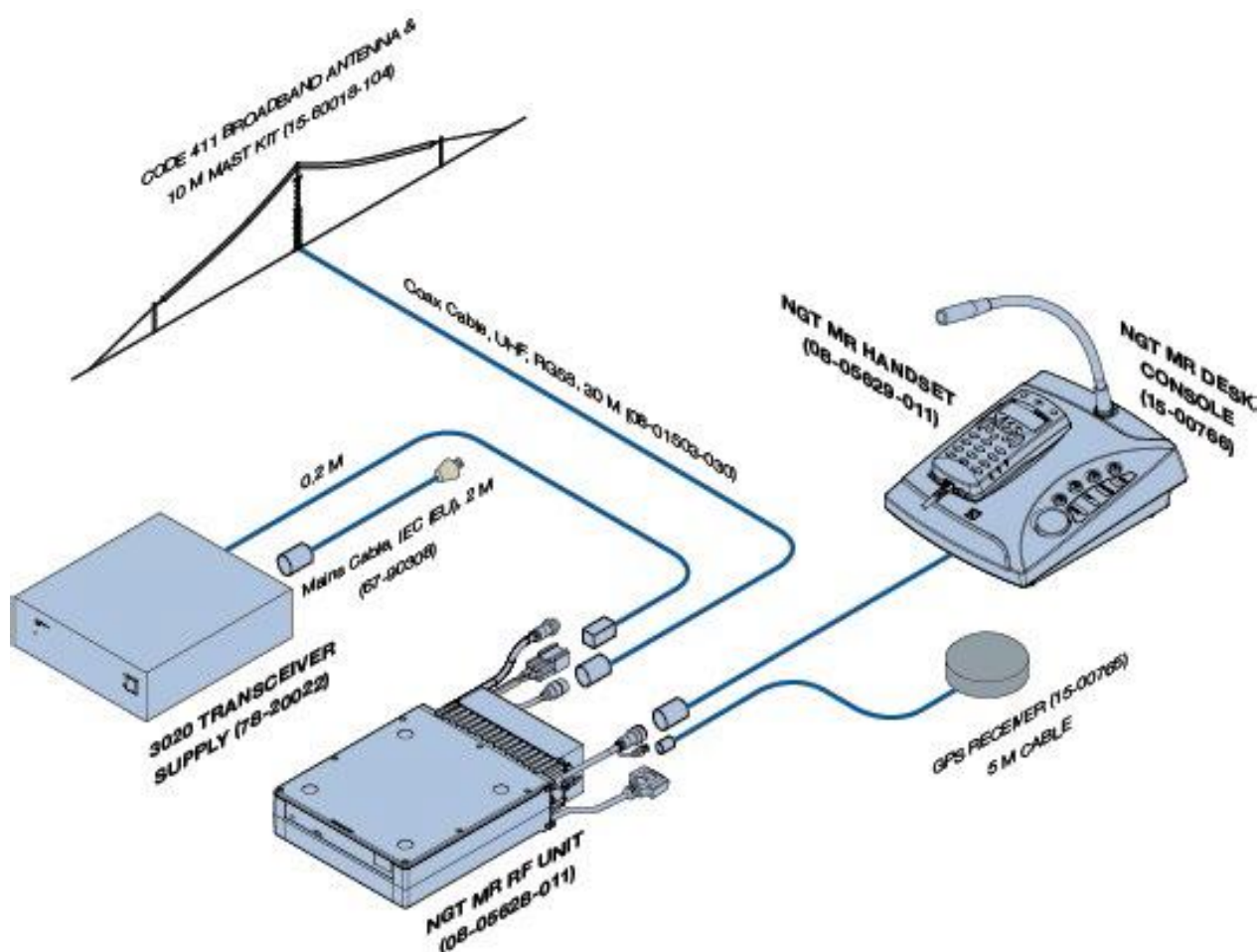


This package contains the key components required for a NGT MR Vehicular system. The main RF Unit is controlled via the MR Handset via the 6 m handset control cable which also provides a connection point for the Speaker. A GPS receiver accessory is provided as part of the package when a Frequency Hopping capable variant of the MR RF Unit is selected. The antenna system comprises the 9350M Automatic Tuning unit complete with a choice of fibreglass and stainless steel whips. The NGT MR Transceiver is designed to operate from a 12 V DC source. Maximum RF power output from this system is 125 W.

NGT MR Vehicle Comprising:

NGT MR RF Unit	AT-NMR-000-###
Frequency Hopping (optionally)	AT-MIL-OPT-100
GPS Receiver (with Frequency Hopping)	AT-ACS-EX-110
NGT MR Handset	AT-NMR-ACS-101
NGT MR Handset Cradle	AT-ACS-NSR-107
NGT MR Handset Control Cable	AT-ACS-EX-102-006
Speaker	AT-ACS-117
RF Unit Cradle and Battery Cable	AT-ACS-111-006
Coax Cable, UHF, RG58	AT-CC-100-006
9350M Antenna	AT-ANT-9350M-100-001
9350M Spring	AT-ANT-9350M-100-004
9350M Stainless Steel Whip, 1.2 m	AT-ANT-9350M-100-002
9350M Fibreglass Whip, 1.6 m	AT-ANT-9350M-100-003
NGT Antenna Control Cable	AT-CCM-001-006
Vehicle Installation Kit	AT-ACS-112
NGT MR Operator Guide: - Russian - English	AT-NMR-ACS-103-001 AT-NMR-ACS-103-002
9350M Installation Handbook	AT-ANT-9350M-100-005

NGT MR BASE (#AT-NMR-003)



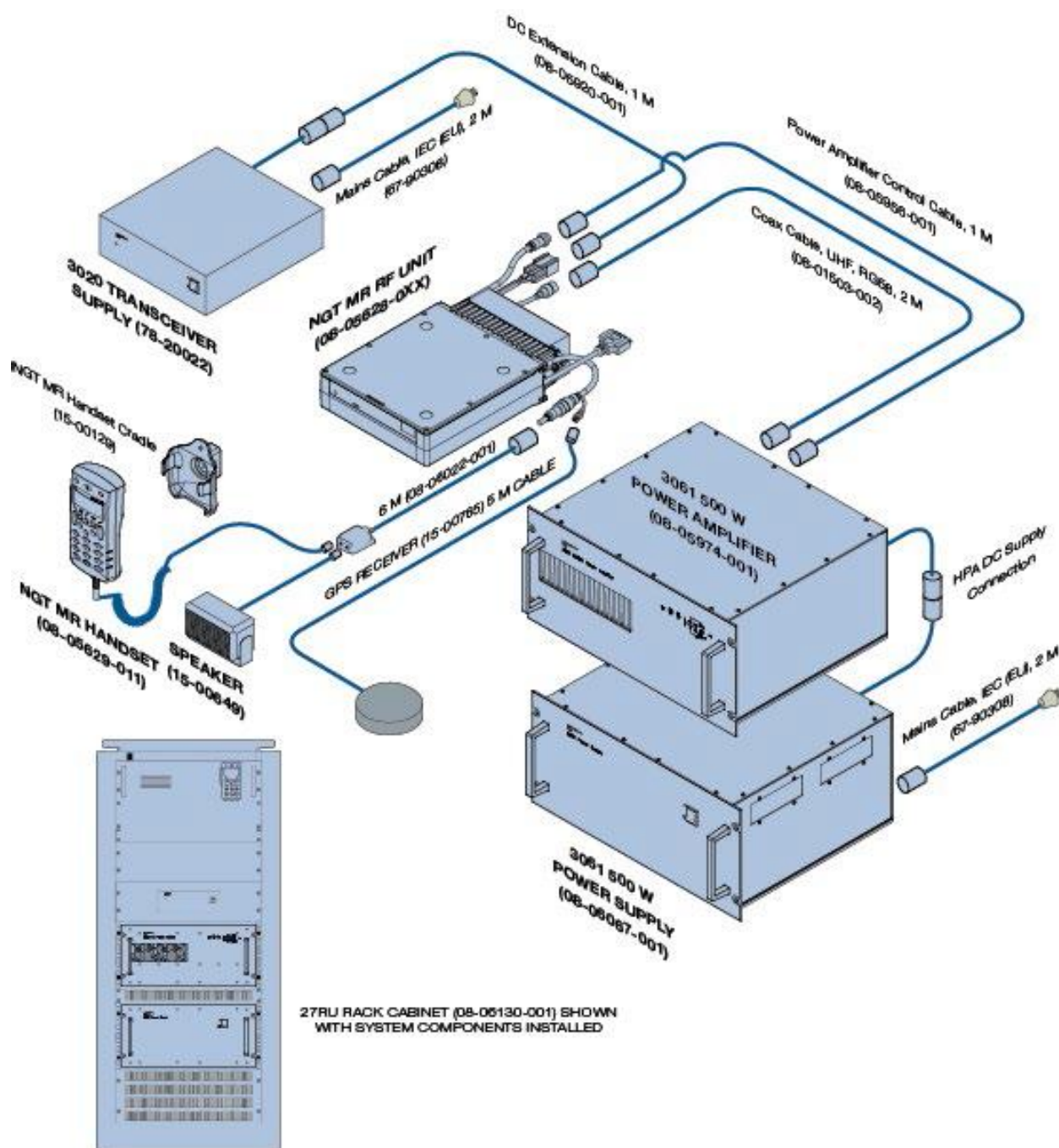
This package contains the key components required for a NGT MR Base System. The main RF Unit is controlled using the MR Desk Console via a 2 m control cable. The Desk Console has a built in microphone, speaker, dedicated PTT and has the convenience of being able to use the standard MR Handset for transceiver control and configuration. Power is provided by the 3020 AC Mains power supply. A GPS receiver is provided as part of the package when a Frequency Hopping capable variant of the MR RF Unit is selected.

The antenna system comprises broadband dipole and 10 m mast antenna kit, providing continuous coverage from 2 to 30 MHz. Maximum RF power output from this system is 125 W.

Комплект стационарной радиостанции NGT MR включает:

NGT MR RF Unit	AT-NMR-000-###
Frequency Hopping (optionally)	AT-MIL-OPT-100
GPS Receiver (with Frequency Hopping)	AT-ACS-EX-110
NGT MR Desk Console	AT-NMR-000-004
NGT MR Handset	AT-NMR-ACS-101
Self Adhesive Rubber Feet (x4)	AT-ACS-119
Multiwire Broadband Dipole Antenna BBA-120	AT-ANT-BBA-120
Earth Braid	AT-ACS-102
3020 Transceiver Supply	AT-PS-3020
Coax Cable, UHF, RG58	AT-CC-100-030
Mains Cable, IEC (EU)	AT-3020-004
NGT MR Operator Guide:	
- Russian	AT-NMR-ACS-103-001
- English	AT-NMR-ACS-103-002

NGT MR HIGH POWER 500 W (#AT-NMR-004)

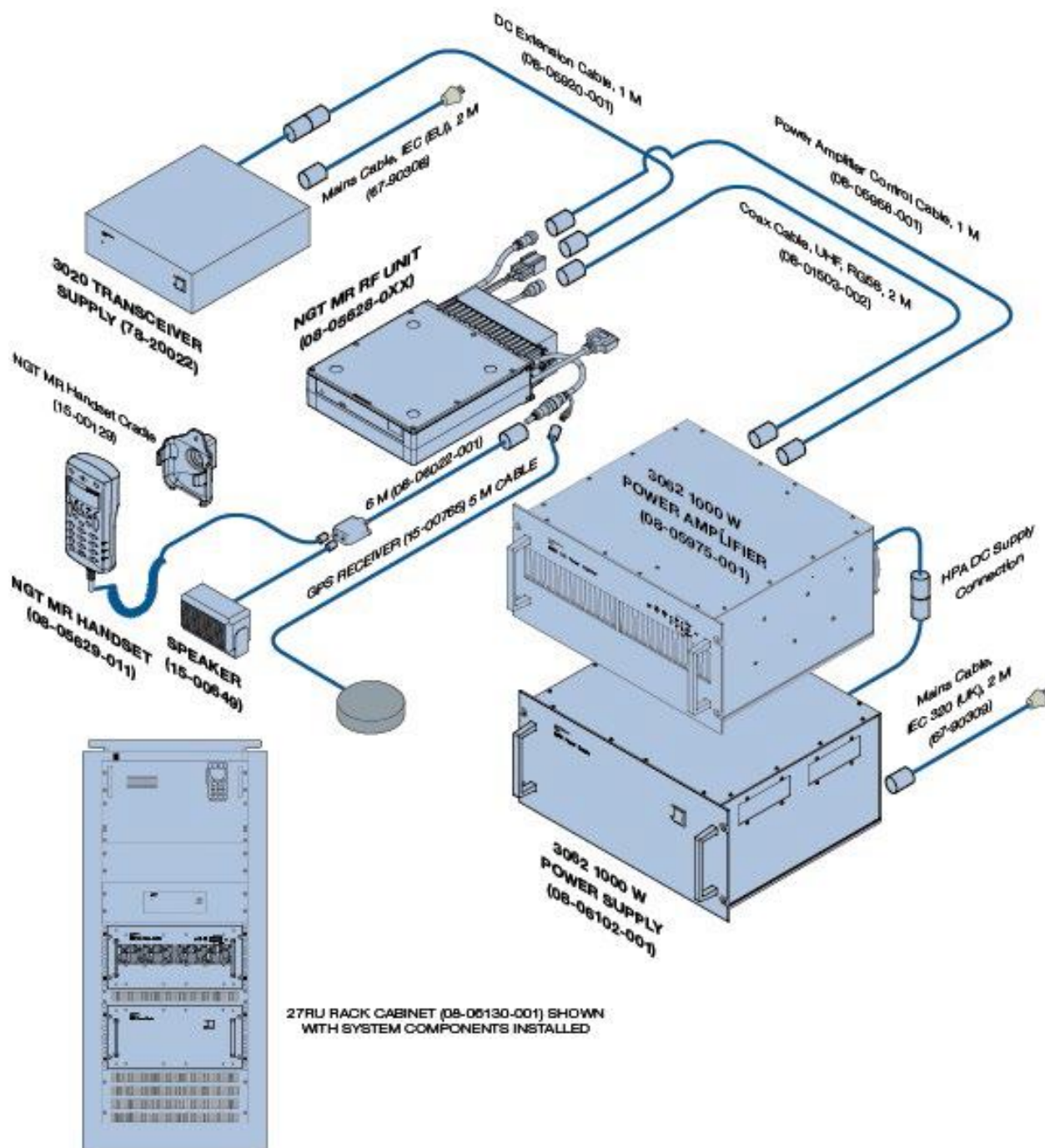


This package contains the key components required for a NGT MR Base system with RF power output boosted to 500 W and housed in a 27RU, 19" rack cabinet. Control of the system is via the MR Handset mounted on the upper most rack tray. A GPS receiver is provided as part of the package when a Frequency Hopping capable variant of the MR RF Unit is selected. Primary power for the NGT MR RF Unit is provided by the 3020 AC Mains Power Supply and the High Power Amplifier is supplied via its own dedicated 3061 AC Mains Power Supply. No antenna is provided with this package and should be selected as a separate item.

NGT MR High Power 500 W comprising:

NGT MR RF Unit	AT-NMR-000-###
Frequency Hopping (optionally)	AT-MIL-OPT-100
GPS Receiver (with Frequency Hopping)	AT-ACS-EX-110
NGT MR Handset	AT-NMR-ACS-101
NGT MR Handset Cradle	AT-ACS-NSR-107
NGT MR Handset Control Cable	AT-ACS-EX-102-006
Speaker	AT-ACS-117
External ALC Option (Factory Fit)	AT-NSR-104
3061 500 W Power Amplifier	AT-3061-000-001
Power Amplifier Control Cable	AT-HPWR-100
Coax Cable, UHF, RG58	AT-CC-100-002
DC Extension Cable	AT-RCK-109
3061 500 W Power Supply	AT-3061-000-002
3020 Transceiver Supply	AT-PS-3020
Mains Cable, IEC (EU) for 3020 PSU	AT-3020-004
Mains Cable, IEC (EU) for 3061 PSU	AT-3020-004
Standard Rack Cabinet	AT-RCK-HP
NGT MR Operator Guide: - Russian - English	AT-NMR-ACS-103-001 AT-NMR-ACS-103-002
3061/3062 PA Reference Manual	AT-HPWR-101

NGT MR HIGH POWER 1000 W (#AT-NMR-005)



This package contains the key components required for a NGT MR Base system with RF power output boosted to 1000 W and housed in a 27RU, 19" rack cabinet. Control of the system is via the MR Handset mounted on the upper most rack tray. A GPS receiver is provided as part of the package when a Frequency Hopping capable variant of the MR RF Unit is selected. Primary power for the NGT MR RF Unit is provided by the 3020 AC Mains Power Supply and the High Power Amplifier is supplied via its own dedicated 3062 AC Mains Power Supply. No antenna is provided with this package and should be selected as a separate item.

NGT MR High Power 1000 W comprising:

NGT MR RF Unit	AT-NMR-000-###
Frequency Hopping (optionally)	AT-MIL-OPT-100
GPS Receiver (with Frequency Hopping)	AT-ACS-EX-110
NGT MR Handset	AT-NMR-ACS-101
NGT MR Handset Cradle	AT-ACS-NSR-107
NGT MR Handset Control Cable	AT-ACS-EX-102-006
Speaker	AT-ACS-117
External ALC Option (Factory Fit)	AT-NSR-104
3062 1000 W Power Amplifier	AT-3062-000-001
Power Amplifier Control Cable	AT-HPWR-100
Coax Cable, UHF, RG58	AT-CC-100-002
DC Extension Cable	AT-RCK-109
3062 1000 W Power Supply	AT-3062-000-002
3020 Transceiver Supply	AT-PS-3020
Mains Cable, IEC (EU) for 3020 PSU	AT-3020-004
Mains Cable, IEC (EU) for 3062 PSU	AT-3020-005
Standard Rack Cabinet	AT-RCK-HP
NGT MR Operator Guide:	
- Russian	AT-NMR-ACS-103-001
- English	AT-NMR-ACS-103-002
3061/3062 PA Reference Manual	AT-HPWR-101

ТРАНСИВЕРЫ NGT MR — Типы радиоблоков



The NGT MR Transceiver is available in two variations:

- Green with Frequency Hopping capability - **#AT-NMR-000-001***
- Green non-Frequency Hopping - **#AT-NMR-000-002**

*

- This transceiver is capable of Frequency Hopping. In order to enable Frequency Hopping you must also add the Frequency Hopping option (part number AT-MIL-OPT-100).
- This product is subject to Australian Government Export controls. A signed end-user Declaration must be provided for supply of this product.

The NGT MR Transceiver is a cost-effective solution to meet your military HF needs. With optional Frequency Hopping capability and optional voice encryption, full in-built 125 W PEP RF output power, and interoperability through FED-STD-ALE or optional JITC certified MIL-STD-188-141B ALE. It is capable of voice, data, email, fax and GPS tracking — all in a single cost effective unit.

Standard Features:

Frequency Hopping for secure communications

General Purpose Interface Port (GPIO)

400 channels, 1.6–30 MHz, 10 networks

Scanning of multiple networks

125 W PEP, 12 V DC, USB/LSB/AM

In-built Easitalk speech noise reduction

Morse capability

Meets MIL-STD-810F for shock, vibration and dust

NGT MR TRANSCEIVER OPTIONS:

Frequency Hopping	AT-MIL-OPT-100
MIL-STD-188-141B ALE Upgrade	AT-MIL-OPT-105
GPS Calling Enable	AT-NSR-103
CIVS Voice Scrambler	AT-OPT-102
TXD, Tx Program Disable	AT-OPT-103
Amateur Mode	AT-OPT-101
External ALC (Factory Fit)	AT-NSR-104
High Speed Data (Factory Fit)	AT-NSR-105
CES-128 Voice Encryptor (Factory Fit)	AT-NSR-113
AES-256 Voice Encryptor (Factory Fit)	AT-NSR-112
2.7 kHz BW Filter (Factory Fit)	AT-NSR-110
500 Hz Filter (Factory Fit)	AT-NSR-109
ISB Mode (Factory Fit)	AT-NSR-115
Option Fan (Factory Fit)	AT-NSR-114

NGT MR TRANSCEIVER ACCESSORIES

NGT MR Handset	AT-NMR-ACS-101
Speaker	AT-ACS-117
NGT MR Handset Control Cable, 6 m	AT-ACS-EX-102-006
NGT MR Desk Console	AT-NMR-000-004
Battery Cable, 6 m	AT-ACS-101-001
Earth Braid, 1.5 m	AT-ACS-102
Earth Wire, 0.5 m	AT-ACS-121
Morse Key	AT-ACS-107
GPS Receiver	AT-ACS-EX-110
Desk Console Headphones	AT-ACS-NSR-109
RF Unit Cradle and Battery Cable	AT-ACS-111-006
Vehicle Installation Kit	AT-ACS-112
RF Unit Mounting Cradle	AT-ACS-113
NGT MR Handset Cradle	AT-ACS-NSR-107
Fuse Holder with 32 A Fuse	AT-ACS-115
Fuse, 32 A	AT-ACS-116
NGT MR Handset Control Cable	AT-ACS-EX-102-006
NGT MR Transceiver Operator Guide (english)	AT-NMR-ACS-103-003

RM50e HF Data Modem

(#AT-RM50)



The RM50e is a high performance MIL Spec HF modem designed to connect to the NGT family of radios. On-air compatible with the RM50 in the 2110M series Manpacks, this modem provides legacy interoperability with systems running Fixed Frequency and ALE networks operating STANAG 5066 email.

The RM50e operates using the most highly advanced Military Standard (MIL-STD) waveforms, including STANAG 4539 and MIL-STD-188-110A/B, providing adaptive rates from 75-9600 bit/s coded. When used in conjunction with an ISB capable NGT, even higher rates of up to 19200 bit/s are available using MIL-STD-188-110B Appendix F waveforms. The RM50e modem must be used in conjunction with RC50-C Email software.

STANDARD FEATURES:

On-air compatible with RM50 (2110M Manpack Internal Modem)

MIL-STD Waveforms (MIL-STD-188-110A, MIL-STD-188-110B (Inc. Appendix F), STANAG 4285, STANAG 4529, STANAG 4415, STANAG 4539)

ISB capable

Data Encryption (AES-256 bit Algorithm, up to 256 stored keys, Key fill via Codan Key Management Software (KMS).

MIL-STD-810F Immersion, Dust, Vibration

NOTE:

For optimum performance, the NGT MR must be fitted with the 2.7 kHz BW Filter option (part number AT-NSR-110) and the High Speed Data option (part number AT-NSR-105)

Transceiver and data cables must be ordered separately

RM50e Modem Accessories:

Cable, RM50e to NGT Transceiver Interface:

- 1 m
- 6 m

AT-RM50-101-001
AT-RM50-101-006

Cable, Data Interface 19way MIL to USB A, 2 m

AT-2110-ACS-101

Operator Guide, RM50e HF Data Modem , CD (rus)

AT-RM50-102-001

Operator Guide, RM50e HF Data Modem, book (eng)

AT-RM50-102-002

3033 Telephone Interconnect (#AT-3033-000)



Codan's telephone interconnect equipment can link into the telephone system enabling you to make or receive telephone calls on your HF transceiver. Comes with all cables and User Guide.

STANDARD FEATURES:

Fully automated and intuitive operation

Multilingual voice prompts

Flexible configuration and remote management

Worldwide compliance (Telephone and EMC)

Radio user can access public telephone network

Telephone users can contact radio users

Designed for extreme conditions

3033 Telephone Interconnect comprising:

3033 Telephone Interconnect

3033 to Transceiver Interface Cable

3033 to 3020 Transceiver Supply Cable

3033 User Guide on CD (English)

Cable, 6-way Phone

Earth Wire, 0.5 m

Cable, Ethernet Crossover CAT-5E, Red:
- 2m
- 6m

Cable, Ethernet Straight CAT-5E, Blue:
- 2m
- 6m

POWER AMPLIFIERS

3061 500 W Power Amplifiers (#AT-3061)



A reliable and affordable high power solution for voice and data communication.

STANDARD FEATURES:

500 W PEP / 300 W average output power

100% continuous mode

100–270 V AC 50/60 Hz supply voltage

Fully protected against all load conditions

Fan forced cooling with thermostatically controlled fans

125 W PEP in bypass mode

19" rack mount (5RU + 5RU)

Interface cables for NGT MR Transceiver (coaxial and control cables)

3061 500 W Power Amplifier comprising:

3061 500 W Power Amplifier

3061 500 W Power Supply

External ALC Opt (Retro Fit) for NGT MR

Earth Braid, 1.5 m

Coax Cable, UHF, RG58, 2 m

Power Amplifier Control Cable

3061/3062 PA Reference Manual

Mains Cable, IEC, 2 m

Standard High Power Rack Configuration

Cable, DC Extension, 1 m

3062 1000 W Power Amplifiers (#AT-3062)



A reliable and affordable high power solution for voice and data communication.

STANDARD FEATURES:

1000 W PEP / 600 W average output power

100% continuous mode

100–270 V AC 50/60 Hz supply voltage

Fully protected against all load conditions

Fan forced cooling with thermostatically controlled fans

125 W PEP in bypass mode

19" rack mount (5RU + 5RU)

Interface cables for NGT MR Transceiver (coaxial and control cables)

3062 1000 W Power Amplifier comprising:

3062 1000 W Power Amplifier

3062 1000 W Power Supply

External ALC Opt (Retro Fit) for NGT MR

Earth Braid, 1.5 m

Coax Cable, UHF, RG58, 2 m

Power Amplifier Control Cable

3061/3062 PA Reference Manual

Mains Cable, IEC, 2 m

Standard High Power Rack Configuration

Cable, DC Extension, 1 m

NOTE:

The 3062 Power Amplifier is suitable for use with NGT MR systems, it is not suitable for use with the 2110M Transceiver

Ensure the antenna used is suitable for 1000 W operation

Order External ALC Option (Factory Fit), part number AT-NSR-104, when purchasing the Power Amplifier with an NGT MR Transceiver

Specify the mains cable (AU, EU, UK or US) at the time of ordering the Power Amplifier and Power Supply Unit

3061/3062 Accessories:

Earth Braid, 1.5 m	AT-ACS-102
Cable, Power Amplifier Control	AT-HPWR-100
Cable, 3C Blk Mld IEC EU, 2 m	AT-3020-004
Cable, 3C Blk Mld IEC UK, 2 m	AT-3020-005

STANDARD HIGH POWER RACK CONFIGURATION

Standard High Power Rack Configuration (#AT-RCK-HP)

Designed to rack mount an NGT MR High Power 500 W or 1000 W system.

Comprising:

19" 27RU rack complete with rear door, vented top and side panels

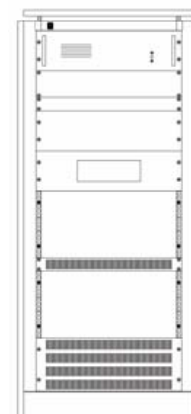
NGT rack mount tray for an NGT Transceiver

NGT rack mount tray for 3020 Transceiver Supply

Rack mount blanking panels 1RU, 2RU and 3RU supplied

Pre-fitted equipment rails

Assorted cable ties, screws, washers and cage nuts



Note:

Rack comes pre-assembled ready for a NGT Transceiver and high power amplifier to be mounted

6RU of space available for additional equipment

NGT Transceiver, power amplifier and power supplies are ordered separately

Does not include a 1 m DC Extension Cable for the NGT Transceiver

19" Rack Accessories:

NGT Universal 19" Rack-mounting Tray 3RU with Blank Front Panel <i>(Suitable for NGT RF Units, 3030 NGT Remote Interface)</i>	AT-RCK-101
NGT Universal 19" Rack-Mounting Tray 3RU, Front Panel Speaker Grill and Mounting Holes <i>(Suitable for NGT RF Unit. Speaker can be mounted behind Grill and handset can be mounted on front panel using cradle)</i>	AT-RCK-102
19" Rack-Mounting Frame <i>(Suitable for 3020 Transceiver Supply, and 3012 or 3212 HF Data Modems)</i>	AT-RCK-103
Set of 1RU + 2RU Blank Front Panels	AT-RCK-105
19" 4RU Vent Panel	AT-RCK-106
19" 1RU Vent Panel	AT-RCK-107
Fixed Equipment Rail, 457 mm long	AT-RCK-108
Cable, DC Extension, 1 m	AT-RCK-109
Earth Braid, 1.5 m	AT-ACS-102
Earth Wire, 0.5 m	AT-ACS-103

POWER SUPPLIES

3020 Transceiver Supply (#AT-PS-3020)



Universal AC input (100 to 240 V AC) heavy duty power supply providing a regulated 13.8 V DC Output for the NGT MR. Designed for environments with unreliable and fluctuating mains systems. Suitable for use with either voice or data stations.

3020 Transceiver Supply Accessories:

Cable Kit for Float Charge	AT-ACS-114
3RU Rack-mounting Frame for 3020	AT-3020-002
Cable, DC Extension, 1 m	AT-RCK-109
Cable, 3C Blk Mld IEC, EU, 2 m	AT-3020-004
Earth Braid, 1.5 m	AT-ACS-102

3524 DC-DC Converter (#AT-PS-3524)



Operates in a 24 V DC automotive electrical system providing a safe 12 V output for 12 V equipment. It is a low noise voltage regulator designed for use with sensitive radio communications equipment. The maximum output is 25 Amps. The conversion efficiency at full load is more than 85%.

3524 Converter Accessories:

Cable, Power NGT to 3520/3524, 2 m	AT-NGTM-ACS-101
Cable, Power 2110 to 3524, 2 m	AT-2110M-ACS-105
Cable, Battery to 3524, 6 m	AT-3524-002

3520 Transceiver Supply (#AT-PS-3520)

The 3520 Transceiver Supply is a universal AC input (100 to 240 V AC) heavy duty power supply, providing a regulated 13.8 V DC Output for the NGT MR and 2110M. Vehicle mounting cradle available.



3520 Transceiver Supply (Green) - #AT-PS-3520-001



3520 Transceiver Supply (Black) - #AT-PS-3520-002

3520 Transceiver Supply comprising:

3520 Transceiver Supply (Green)	AT-PS-3520-001
Mains Cable (EU)	AT-PS-3520-003
3520 User Guide	AT-PS-3520-004

3520 Transceiver Supply Accessories:

Vehicle Mounting Cradle, 3520 with Screws	AT-2110M-ACS-102
Vehicle Shock Mount	AT-2110M-ACS-104
Cable, Mains Input, 2m: - with EU plug - with US plug - with UK plug	AT-PS-3520-002-001 AT-PS-3520-002-002 AT-PS-3520-002-003
Cable, Power 2110 to 3520/3524, 2 m	AT-2110M-ACS-105
Cable, Power NGT to 3520/3524, 2 m	AT-NGTM-ACS-101
Cable, Battery Backup, 4 m	AT-PS-3520-004



Solar Power Supply 40 W (#AT-PS-SOL-040)

Recommended for voice (light duty)

Solar Power Supply 40 W comprising:

Single 40 W solar panel

Mounting frame complete with anti-bird spikes

Solar battery regulator

Heavy duty twin core cable

Battery lugs

Solar Power Supply 80 W (#AT-PS-SOL-080)



Recommended for voice (heavy duty)

Solar Power Supply 80 W comprising:

Single 80 W solar panel

Mounting frame complete with anti-bird spikes

Solar battery regulator

Heavy duty twin core cable

Battery lugs

Solar Power Supply 240 W (#AT-PS-SOL-240)



Recommended for fax and data (heavy duty)

Solar Power Supply 240 W comprising:

Three 80 W solar panel

Mounting frame complete with anti-bird spikes

Solar battery regulator

Heavy duty twin core cable

Battery lugs

Solar Power Supply Accessories:

Cable, Battery Paralleling (+ve)

AT-PS-SOL-101

Cable, Battery Paralleling (-ve)

AT-PS-SOL-102



**Battery, Lead Acid 12 V 90Ah (supplied dry charged)
(#AT-PS-BAT-090)**

NOTE!

This battery is classified as dangerous goods and may impact freight cost and method.



**Battery, 12 V 100Ah Gelcell
(#AT-PS-BAT-100)**



**Battery, 12 V 185Ah Gelcell
(#AT-PS-BAT-185)**

NGT MR TRANSCEIVER ANTENNAS

Tuner, 9103 Automatic Antenna (#AT-ANT-9103-000)



Designed to suit NGT MR Transceiver. Rated to 150 W PEP voice or data, 2 to 30 MHz

Tuner, 9103 Automatic Antenna with 10 m Cables - #AT-ANT-9103-010

Tuner, 9103 Automatic Antenna with 30 m Cables - #AT-ANT-9103-030

Tuner, 9103 Automatic Antenna comprising:

Tuner, 9103 Automatic Antenna

Mounting bracket

Control cable (10 m / 30 m on choice) to suit NGT MR Transceiver

Coaxial cable (10 m / 30 m on choice)

Operation handbook

Tuner, SG235C 500 W PEP (#AT-ANT-SG235-000)



Designed to suit 500 W high power NGT MR systems for voice and data, 2 to 30 MHz

Tuner, SG235C comprising:

Tuner, SG235C

Mounting bracket

Operation handbook

NGT MR Tuner Accessories:

Copper Earth Strip 50 mm x 0.46 mm AT-ANT-102-001

Cable, SG235C Control, 30 m AT-ANT-103-001

Cable, Coax Assembly, UHF Type Connectors, RG58, 30 m AT-CC-100-030

Base Whip (#AT-ANT-BW-000)



The Base Whip Antenna is 9.5 m (31 ft) in height, and requires an automatic antenna tuner. It is mounted vertically on a suitable ground plane or metal roof. An earth mat may be required where a suitable ground plane cannot be found. This antenna may be used where space is restricted and omni-directional coverage is required. Antenna rated to 500 W PEP.

Ant, Base Whip, Ground Mounting (9.5 m / 31 ft Unloaded) (#AT-ANT-BW-001)

Comes complete with ground plate base

Note:

Coaxial cable and tuner are not supplied

Requires earth mat for ground installations

Guying details: One guy set with four guy wires. 4 m guy radius

Compatible with 9103 and SG235C Antenna tuners

Lightning protection is recommended for fixed base station installations

Ant, Base Whip, Roof Mounting (9.5 m / 31 ft Unloaded) (#AT-ANT-BW-002)

Comes complete with ground plate base

Note:

Coaxial cable and tuner are not supplied

Requires radial ground plane for roof installations

Guying details: One guy set with four guy wires. 4 m guy radius

Compatible with 9103 and SG235C Antenna tuners

Lightning protection is recommended for fixed base station installations

NGT MR Base Whip Accessories:

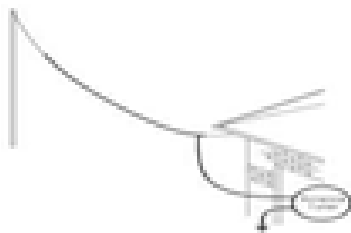
Earth Mat for Base Whip Antenna, Ground Installations

AT-ANT-104

Radial Ground Plane for Base Whip Antenna, Roof Installations

AT-ANT-105

Ant, Tuned Long Wire (2–30 MHz) (#AT-ANT-LW)



This antenna exhibits a good combination of space efficiency and broadband capability. It is designed to be used with the 9103 and SG235C Antenna Tuners. A suitable antenna where space is limited.

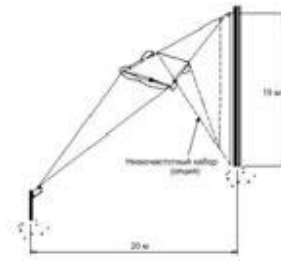
NOTE:

Automatic antenna tuner is required

Support mast not supplied

Lighting protection is recommended for fixed base station installations

Semi-delta (#AT-ANT-SDEL)



The Semi-delta Antenna is a high performance, omnidirectional broadband antenna that performs well over short to medium distances.

This antenna requires a large cleared area at ground level for installation, and is more suitable for permanent fixed site installations.

Ant, Semi-delta, 125 W PEP, 2–14 MHz (#AT-ANT-SDEL-001)

Includes: pulleys, halyards, basic counterpoise and installation hardware

Ant, Semi-delta, 1000 W PEP, 2–14 MHz (#AT-ANT-SDEL-002)

Includes: pulleys, halyards, basic counterpoise and installation hardware

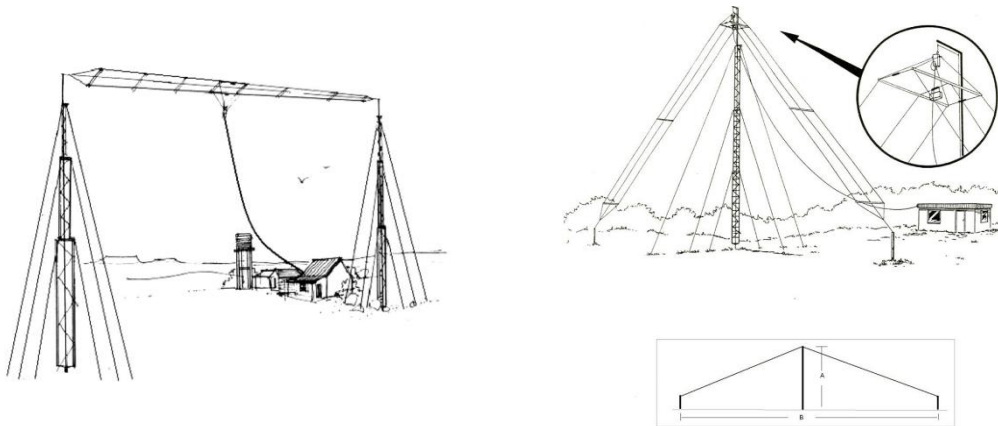
Note:

Where soil conditions are very poor, an additional counterpoise kit may be required

Lightning protection is recommended for fixed base station installations

Coaxial cable and mast not supplied

HF Broadband Multi-wire Dipole Antennas BBA-120 (#AT-ANT-BBA-120)



High efficiency broadband multi-wire base antenna. Sturdy stainless steel and fiberglass construction, can be mounted horizontally or as inverted V. Supplied with 30m of coaxial cable and instructions. Extended Length version of BBA-120 for increased performance at 2-3 MHz.

Standard Features:

Frequency Range 2-30 MHz

Impedance 50 Ohm

Power Rating 250W PEP

VSWR Less than 2:1 cross band

Mounting Height 10 m

Overall Length 30 m

Wind Rating 210 Kilometres per hour

Weight: 4Kg (5.3 inc. 30m coax)

Size: 135 x 16 x 11cm

HF Broadband Multi-wire Dipole Antenna BBA-500 (#AT-ANT-BBA-500)

КВ Антенна BBA-500 представляют собой 500-Ваттную версию антенны BBA-120. Антенна BBA-500 это широкополосная антенна, запитываемая в центре. Выходная мощность антенны составляет 500 Ватт. Излучающая эффективность превышает эффективность других антенн в этом классе. Длина антенны BBA-500 составляет 28 метров, а длина антенны BBA-500E составляет 52 метра.

Антенна BBA-500E требует больше места для монтажа, но более эффективна на низких частотах КВ диапазона (2-4 МГц). Антенный тюнер не требуется.

Антенна изготовлена из нержавеющей стальной проволоки толщиной 3.2. мм, покрытой сплавом алюминия, стекловолоконных распорных трубок устойчивых к ультрафиолетовому излучению. В антенне имеется встроенная грозозащита и защита от статического напряжения.

Антенна может быть установлена в горизонтальной конфигурации или в виде перевернутой «V».

HF Broadband Multi-wire Dipole Antenna BBA-1000 (#AT-ANT-BBA-1000)

The BPA-1000 is a 1 Kilowatt rated, centre-fed, broadband antenna with an overall length of 37 meters. Radiation efficiency exceeds that of other antennas in this class and recent design changes have improved VSWR markedly across the band. No antenna tuner is required.

Construction is of 3.2mm stainless steel cable with UV-stable fibreglass spreaders and glass reinforced polyester and diecast aluminium component cases. All external fittings and connections are of stainless steel. Spark gaps are fitted at the balun for lightning protection. The antenna can be mounted horizontally or as an inverted V

ANTENNA MASTS

Mast, Guyed 12 m with Erection Kit (#AT-ANT-MST-012)

Four section 12 m mast.

Designed to withstand wind speeds up to 144 kph (40 m/s) in clear air with head loads up to 12 kg, subject to ground anchoring.



Mast, Guyed 15 m with Erection Kit (#AT-ANT-MST-015)

Five section 15 m mast.

Designed to withstand wind speeds up to 144 kph



Mast, Guyed 10 m, Lightweight Mast (#AT-ANT-MSTL-010)

Two guy sets, each with three guy wires and one back stay guy. 5 m guy radius. Lightweight guyed aluminium mast, halyard, and all hardware for ground mounting



Mast, Guyed 10 m, Premium Mast (Raw) (#AT-ANT-MST-010-001) Mast, Guyed 10 m, Premium Mast (Black) (#AT-ANT-MST-010-002)

Mast suitable for air freight.

Two guy sets, each with three guy wires and one back stay guy. 5 m guy radius



2110M & NGT MR ANTENNAS

3040 Automatic Tuning Whip Antenna (#AT-ANT-3040)



The 3040 Automatic Whip Antenna is a low profile, rugged, lightweight unit designed for mobile installations. It provides fast automated tuning across the HF band. The 3040 is easy to install and meets MIL-STD-810F for shock, immersion, dust and vibration.

STANDARD FEATURES:

Frequency Range 2.5 to 30 MHz

125 W PEP voice or data

Fast tuning typically < 1 sec

Tune from memory

3040 Automatic Tuning Whip Antenna Comprising:

3040 Main Assembly

3040 Spring

Fibreglass Riser, 0.8 m

3040 Fibreglass Whip, 1.6 m

3040 Stainless Steel Whip, 1.65 m

3040 Installation Handbook (English)

NGT MR 3040 (#AT-ANT-3040-001) additionally comprising:

Cable, Control NGT to 9350M/304X	AT-CCM-001-006
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Cable, Coax Assembly, UHF Type Connectors, RG58, 6m	AT-CC-100-006
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2110M 3040 25W (#AT-ANT-3040-002) additionally comprising:

Cable, Control 2110M to 9350M/304X	AT-2110-ANT-103
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Cable, Coax Assembly, UHF Type Connectors, RG58	AT-CC-100-006
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Cable, Coax Assembly, UHF to BNC Type Connectors, RG58, 1 m	AT-2110-ANT-104
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2110M 3040 125W (#AT-ANT-3040-003) additionally comprising:

Cable, Control 2110M to 9350M/304X	AT-2110-ANT-103
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Cable, Coax Assembly, UHF Type Connectors, RG58, 6 m	AT-CC-100-006
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3040 Accessories:

Cable, Coax Assembly, UHF Type Connectors, RG58:	
- 2 m	AT-CC-100-002
- 6 m	AT-CC-100-006
- 8 m	AT-CC-100-008
- 20 m	AT-CC-100-020

Cable, Coax Assembly, UHF to N-Type Connectors, RG58:	
- 2 m	AT-CC-101-002
- 6 m	AT-CC-101-006
- 10 m	AT-CC-101-010
- 20 m	AT-CC-101-020

Cable, Coax Assembly, UHF Type Connectors, RG213:	
- 6 m	AT-CC-200-006
- 10 m	AT-CC-200-010

Cable, Control NGT to 9350M/304X:	
- 2 m	AT-CCM-001-002
- 6 m	AT-CCM-001-006
- 10 m	AT-CCM-001-010
- 20 m	AT-CCM-001-020

Cable, Control 2110M to 9350M/304X:	
- 2 m	AT-2110-ANT-103-002
- 6 m	AT-2110-ANT-103-006
- 10 m	AT-2110-ANT-103-010
- 20 m	AT-2110-ANT-103-020

Cable, Coax Assembly, UHF to BNC Type Connectors, RG58, 1 m	AT-2110-ANT-104
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3040 NVIS Antenna Kit	AT-ANT-3040-200
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9350M Automatic Tuning Whip Antenna (#AT-ANT-9350M)



State-of-the-art robust antenna designed for Frequency Hopping transceivers in mobile installations requiring flexible, high performance HF communications. It provides fast automated tuning over the entire HF frequency range. The 9350M is easy to install, and meets MIL-STD-810F for shock, vibration and immersion.

STANDARD FEATURES:

Frequency Hopping compatible

125 W PEP Voice or Data

Tuning time typically 2 seconds

Transmit frequency range 2 to 30 MHz depending on antenna

Receive frequency range 250 kHz to 30 MHz

9350M Automatic Tuning Whip Antenna comprising:

9350M Main Assembly

9350M Spring

9350M Stainless Steel Whip, 1.2 m

9350M Fibreglass Whip, 1.6 m

9350M Installation Handbook (English)

9350M Automatic Tuning Whip Antenna for NGT MR (#AT-ANT-9350M-001) additionally comprising:

Cable, Control NGT to 9350M/304X	AT-CCM-001-006
Cable, Coax Assembly, UHF Type Connectors, RG58	AT-CC-100-006

9350M Automatic Tuning Whip Antenna for 2110M, 25 W (#AT-ANT-9350M-002) additionally comprising:

Cable, Control 2110M to 9350M/304X	AT-2110-ANT-103
Cable, Coax Assembly, UHF Type Connectors, RG58	AT-CC-100-006
Cable, Coax Assembly, UHF to BNC Type Connectors, RG58, 1 m	AT-2110-ANT-104

9350M Automatic Tuning Whip Antenna for 2110M, 125 W (#AT-ANT-9350M-003) additionally comprising:

Cable, Control 2110M to 9350M/304X	AT-2110-ANT-103
Cable, Coax Assembly, UHF Type Connectors, RG58	AT-CC-100-006

9350M Automatic Tuning Whip Antenna Accessories:

Cable, Coax Assembly, UHF Type Connectors, RG58:	
- 2 m	AT-CC-100-002
- 6 m	AT-CC-100-006
- 8 m	AT-CC-100-008
- 20 m	AT-CC-100-020

Cable, Coax Assembly, UHF to N-Type Connectors, RG58:	
- 2 m	AT-CC-101-002
- 6 m	AT-CC-101-006
- 10 m	AT-CC-101-010
- 20 m	AT-CC-101-020

Cable, Coax Assembly, UHF Type Connectors, RG213:	
- 6 m	AT-CC-200-006
- 10 m	AT-CC-200-010

Cable, Control NGT to 9350M/304X:	
- 2 m	AT-CCM-001-002
- 6 m	AT-CCM-001-006
- 10 m	AT-CCM-001-010
- 20 m	AT-CCM-001-020

Cable, Control 2110M to 9350M/304X:	
- 2 m	AT-2110-ANT-103-002
- 6 m	AT-2110-ANT-103-006
- 10 m	AT-2110-ANT-103-010
- 20 m	AT-2110-ANT-103-020

Cable, Coax Assembly, UHF to BNC Type Connectors, RG58, 1 m	AT-2110-ANT-104
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9350 NVIS Antenna Kit	AT-ANT-9350-200
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3042 HF Antenna Tuner (#AT-ANT-3042)



The 3042 is a low profile, 125 W HF antenna tuning unit designed to deliver high performance and reliability in the world's harshest environments. It provides high speed and efficient tuning of short whip antennas across the full operational HF band

STANDARD FEATURES:

2 to 30 MHz

125 W RF power handling

Fast tuning typically < 1 sec

High efficiency

Waterproof

MIL-STD-810G Environmentals

N-type RF Connector

Used with Vertical (short whip) & NVIS Whip Antennas

Flexible mounting

ALE compatible

Internal receive mode amplifier

3042 HF Antenna Tuner comprising:

3042 HF Antenna Tuner (Green)

3042 Installation Kit

3042 Installation Handbook (English)

3042 HF Antenna Tuner for NGT MR (#AT-ANT-3042-001) additionally comprising:

NGT Antenna Control Cable	AT-CCM-001-006
Coax Cable, UHF to N-Type, RG58	AT-CC-101-006

3042 HF Antenna Tuner for 2110M, 25 W (#AT-ANT-3042-002) additionally comprising:

2110M Antenna Control Cable	AT-2110-ANT-103
Coax Cable, BNC to N-Type, RG58	AT-CCM-100-006

3042 HF Antenna Tuner for 2110M, 25 W (#AT-ANT-3042-003) additionally comprising:

2110M Antenna Control Cable	AT-2110-ANT-103
Coax Cable, N-Type, RG58	AT-CCM-101-006

3042 HF Antenna Tuner Variants:



3042 HF Antenna Tuner (Green) - #AT-ANT-3042-000-001



3042 HF Antenna Tuner (White) - #AT-ANT-3042-000-002

3046 HF Antenna Tuner (#AT-ANTM-3046)



The 3046 is a low profile, 125 W HF antenna tuning unit designed to deliver high performance and reliability in the world's harshest environments. It provides high speed and efficient tuning of short and long whip (up to 9 m) antennas across the full operational HF band.

STANDARD FEATURES:

2 to 30 MHz

125 W RF power handling

Fast tuning typically < 1 sec

High efficiency

Waterproof

MIL-STD-810G Environmentals

N-type RF Connector

Used with Vertical & NVIS Whip Antennas

Flexible mounting

ALE compatible

Internal receive mode amplifier

3046 HF Antenna Tuner comprising:

3046 HF Antenna Tuner (Green)

3046 Installation Kit

3046 Installation Handbook

3046 HF Antenna Tuner for NGT MR (#AT-ANTM-3046-001) additionally comprising:

NGT Antenna Control Cable	AT-CCM-001-006
Coax Cable, UHF to N-Type, RG58	AT-CC-101-006

3046 HF Antenna Tuner for 2110M, 25 W (#AT-ANTM-3046-002) additionally comprising:

2110M Antenna Control Cable	AT-2110-ANT-103
Coax Cable, BNC to N-Type, RG58	AT-CCM-100-006

3046 HF Antenna Tuner for 2110M, 125 W (#AT-ANTM-3046-003) additionally comprising:

2110M Antenna Control Cable	AT-2110-ANT-103
Coax Cable, N-Type, RG58	AT-CCM-101-006

B3046 HF Antenna Tuner Variants:



3046 HF Antenna Tuner (Green) - #AT-ANTM-3046-000-001

3046 HF Antenna Tuner (White) - #AT-ANTM-3046-000-002

3042/3046 Accessories:

Single Hole Mount Base	AT-ANT-106
Flange Mount Base	AT-ANT-107
Flange Mount Bracket	AT-ANT-108
Spring	AT-ANT-109
Fibreglass Whip, 1.6 m	AT-ANT-111
Fibreglass Riser, 0.8 m	AT-ANT-112
Stainless Steel Whip, 1.65 m	AT-ANT-113
3042/3046 NVIS Antenna Kit	AT-ANT-3040-200
Shock Mount	AT-ANT-110
3042/3046 Installation Kit	AT-MIL-ACS-101
Installation Handbook, 3042 Automatic Antenna Tuner	AT-ANT-3042-100
Installation Handbook, 3046 Automatic Antenna Tuner	AT-ANTM-3046-100

3046 Military Grade Accessories:

MIL Spec Antenna Base, NATO Hole Pattern	AT-ANTM-3046-101
MIL Spec Carbon Fibre Whip, 3 m (NOTE: Must be ordered with the Flexible Antenna Shock Mount)	AT-ANTM-3046-102
Flexible Antenna Shock Mount (NOTE: Recommended for use with 3 m Carbon Fibre Whip and Whip Extension Kit)	AT-ANTM-3046-103
Whip Extension Kit (NOTE: The extended whip antenna configuration is for temporary, stationary use only)	AT-ANTM-3046-104
Longwire Antenna (NOTE: The long wire antenna configuration is for temporary, stationary use only)	AT-ANTM-3046-105

3042/3046 Cables:

Cable, Control NGT to 9350M/304X:	
- 2 m	AT-CCM-001-002
- 6 m	AT-CCM-001-006
- 10 m	AT-CCM-001-010
- 20 m	AT-CCM-001-020
Cable, Control 2110M to 9350M/304X:	
- 2 m	AT-2110-ANT-103-002
- 6 m	AT-2110-ANT-103-006
- 10 m	AT-2110-ANT-103-010
- 20 m	AT-2110-ANT-103-020
Cable, Coax Assembly, UHF to N-Type Connectors, RG58, 6 m	AT-CC-101-006
Cable, Coax Assembly, BNC to N-type Connectors, RG58, 6 m	AT-CCM-100-006
Cable, Coax Assembly, N-Type to N-type Connectors, RG58, 6 m	AT-CCM-101-006

EARTHING

Earth Braid, 1.5 m	AT-ACS-102
Earth Wire, 0.5 m	AT-ACS-103

LIGHTNING PROTECTION

Lightning Arrestor	AT-CC-ACS-005
Copper Earth Strip, 50 mm x 0.46 mm, supplied in units of 1 m	AT-ANT-102-001
Earth Stake, 1.8 m long x 13 mm with clamp for earth wire/strip	AT-CC-ACS-006

COAXIAL CABLES

Coaxial Cables Type RG58:

Cable, Coax Assembly, UHF Type Connectors, RG58:	
- 2 m	AT-CC-100-002
- 6 m	AT-CC-100-006
- 8 m	AT-CC-100-008
- 20 m	AT-CC-100-020
- 30 m	AT-CC-100-030

Cable, Coax Assembly, UHF to N-type Connectors, RG58:	
- 2 m	AT-CC-101-002
- 6 m	AT-CC-101-006
- 10 m	AT-CC-101-010
- 20 m	AT-CC-101-020
- 30 m	AT-CC-101-030

Cable, Coax Assembly, BNC to N-type Connectors, RG58:	
- 2 m	AT-CCM-100-002
- 6 m	AT-CCM-100-006
- 10 m	AT-CCM-100-010
- 20 m	AT-CCM-100-020

Cable, Coax Assembly, N-type to N-type Connectors, RG58, 6 m	AT-CCM-101-006
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Cable, Coax Assembly, UHF to BNC Type Connectors, RG58, 1 m	AT-2110-ANT-104
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Cable, Coax Assembly, BNC to BNC Type Connectors, RG58	
- 0,7 m	AT-CCM-101-001
- 2,5 m	AT-CCM-101-002

Coaxial Cables Type RG213:

Cable, Coax Assembly, UHF Type Connectors, RG213:	
- 10 m	AT-CC-200-010
- 30 m	AT-CC-200-030
- 50 m	AT-CC-200-050
- 100 m	AT-CC-200-100

Cable, Coax Assembly, UHF to N-type Connectors, RG213:	
- 10 m	AT-CCM-201-010
- 30 m	AT-CCM-201-030
- 40 m	AT-CCM-201-040

Cable, Coax Assembly, N-type to N-type Connectors, RG213:	
- 10 m	AT-CCM-202-010
- 30 m	AT-CCM-202-030
- 40 m	AT-CCM-202-040

Cables Accessories:

Plug, UHF (RG58) W/proof	AT-CC-ACS-001
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Plug, UHF (RG213) W/proof	AT-CC-ACS-002
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Strain Relief (for RG213)	AT-CC-ACS-003
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Shackle	AT-CC-ACS-004
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MRX TRANSPORTABLE SYSTEMS

The MRX series of ruggedised cases provide the foundation on which to build ruggedised, transportable HF communications systems based around the NGT MR and 2110M Manpack series Transceivers.

The products represented by the part numbers below are the transit cases only, Codan HF equipment, accessories and third party products must be ordered separately. The cases are supplied with the necessary equipment mounting trays and hardware for the various configurations.

Standard features:

Easy to use

Legacy system interoperability

AC Supply

125 W standard (NGT MR)

FED-STD-1045 ALE/CALM (NGT MR)

Optional Features:

MIL-STD-141B ALE (JITC Certified) and FED-STD-1045 ALE/CALM

Data Capable (email & chat messaging)

GPS Tracking

500/1000 W system options

IP Remote Control

COMSEC Solution (CES 128-bit & AES 256-bit)

Note:

Radio equipment and cases are shipped separately

It is highly recommended that allowances be made to provide end user support for installation and system commissioning when quoting these products

MRX Headquarters System:



Case, MRX NGT MR System

Designed to mount quantity one of any model NGT Transceiver using a Handset control point as well as one hardware HF data modem (RM50e). Cases are available in Black, Green or Orange.

For black quote:
AT-MRX-101-001
For green quote:
AT-MRX-101-002
For orange quote:
AT-MRX-101-003

MRX Interoperability System:



Case, MRX NGT MR Interoperability System

Designed to mount quantity one of any model NGT Transceiver using a Handset control point and interoperability system (1 x OIU and 1 x RIU)

For black quote:
AT-MRX-102-001
For green quote:
AT-MRX-102-002
For orange quote:
AT-MRX-102-003

MRX High Power System Expansion:



Case, MRX 500/1000 W High Power Amplifier

Designed to mount one 3061 500 W or 3062 1000 W PA
NOTE: A High Power system comprises both High Power Amplifier and corresponding Power Supply Unit.

For black quote:
AT-MRX-103-001
For green quote:
AT-MRX-103-002
For orange quote:
AT-MRX-103-003



Case, Power Amplifier Power Supply

Designed to mount one 3061 500 W or 3062 1000 W Power Supply.
NOTE: A High Power system comprises both High Power Amplifier and corresponding Power Supply Unit.

For black quote:
AT-MRX-103-001
For green quote:
AT-MRX-103-002
For orange quote:
AT-MRX-103-003

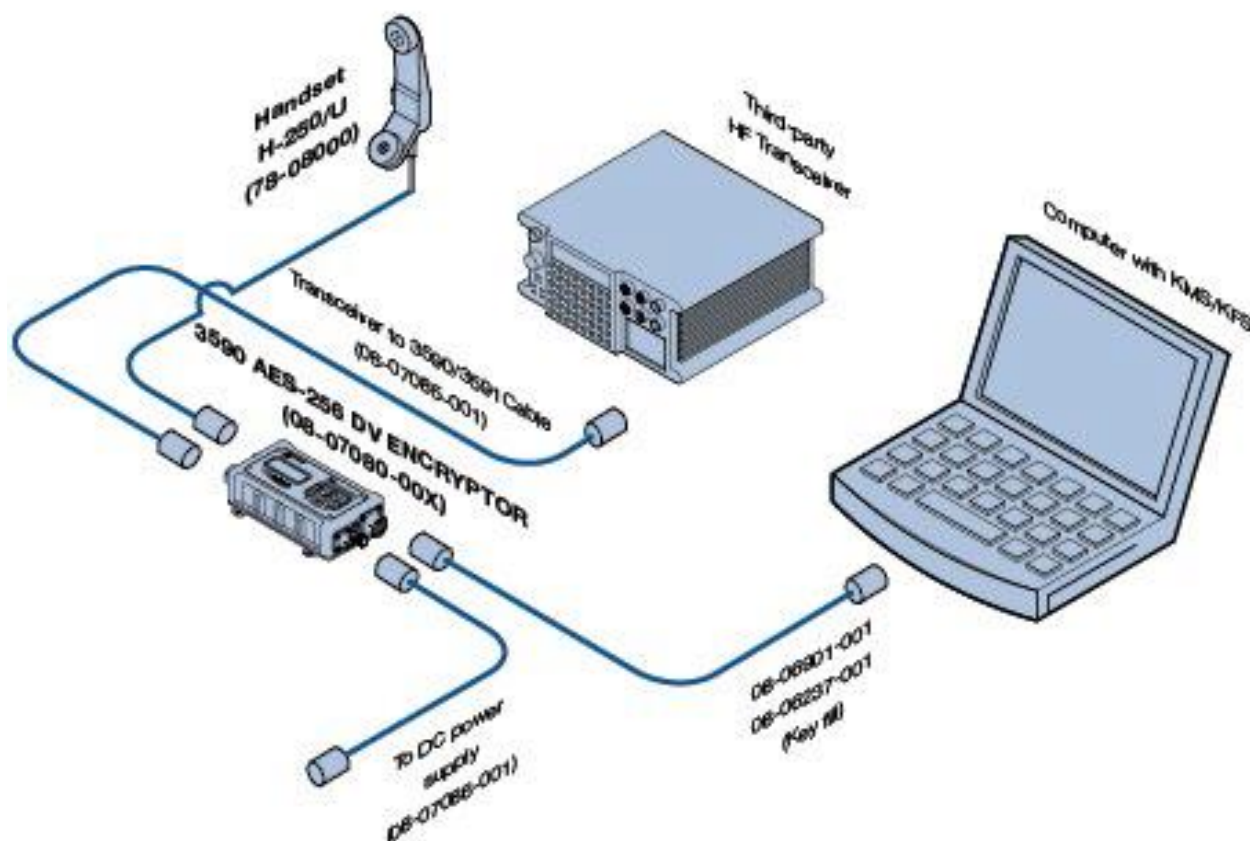
3590 AES-256 DV Encryptor (#AT-3590)



The 3590 AES-256 DV Encryptor is designed for use with legacy HF transceivers, providing voice encryption compatible with the AES-256 DV options for NGT MR and 2110M. It provides a high grade 256-bit AES Encryption with a MELPe digital Vocoder supporting 1200/2400 bit/s data rates. The unit's compact size supports multiple deployment scenarios from manpack to mobile to base platforms.

Available in standard and flange mounting configurations.

3590 AES-256 DV Encryptor System Diagram



(#AT-3590-001) 3590 AES-256 DV Encryptor, Standard configuration
comprising:

3590 AES-256 DV Encryptor	AT-3590-000-001
Transceiver to 3590/3591 Cable	AT-359X-101
3590 AES-256 DV Encryptor User Guide	AT-3590-101
3590 Quick Reference Card	AT-3590-102

(#AT-3590-002) 3590 AES-256 DV Encryptor, Flange Mount configuration
comprising:

3590 AES-256 Encryptor (Flange Mount)	AT-3590-000-002
Transceiver to 3590/3591 Cable	AT-359X-101
3590 AES-256 DV Encryptor User Guide	AT-3590-101
3590 Quick Reference Card	AT-3590-102

Note:

This product is subject to Australian Government Export controls. A signed end-user Declaration must be provided for supply of this product

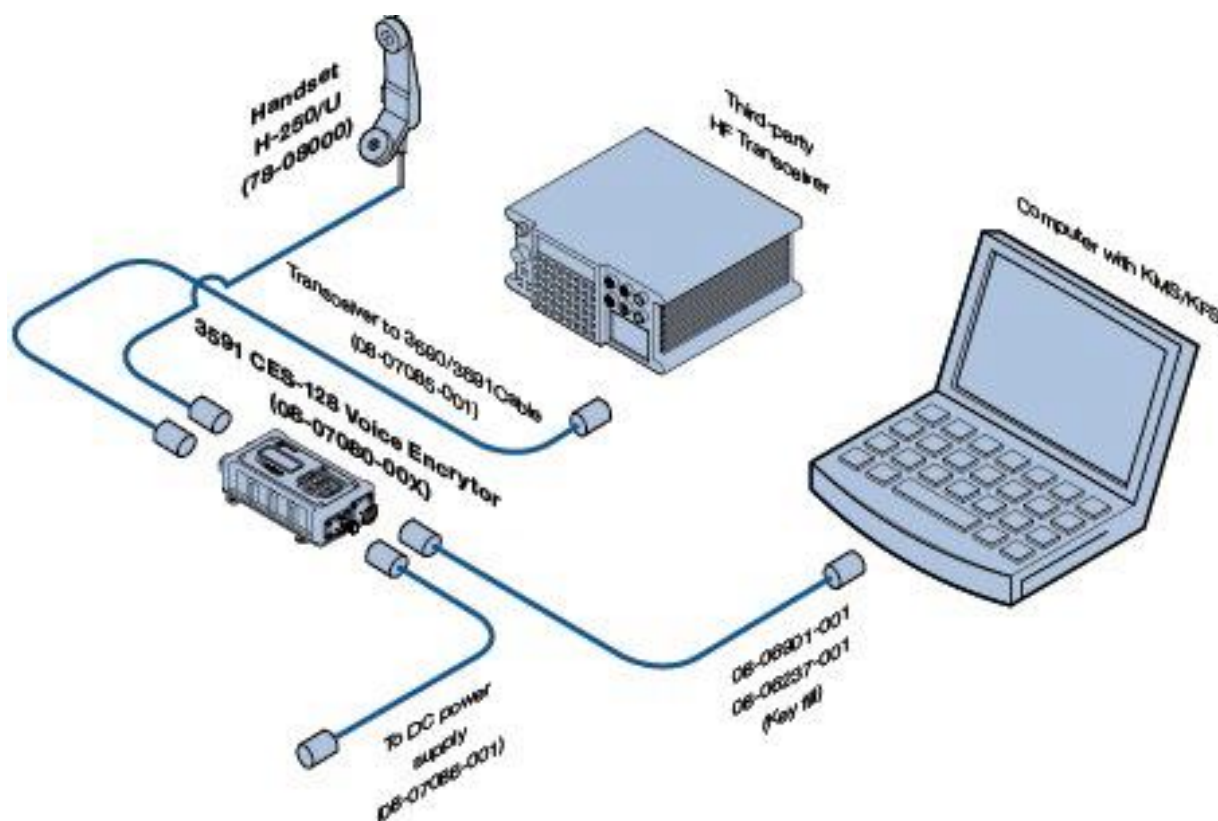
Cables, handset and key fill software must be ordered separately

3591 CES-128 Encryptor (#AT-3591)



The 3591 CES-128 Voice Encryptor is designed for use with legacy HF transceivers, providing voice encryption compatible with the CES-128 options for NGT MR and 2110M. Communications security (COMSEC) is provided through use of a proprietary 128-bit encryption algorithm. The unit's compact size supports multiple deployment scenarios from manpack to mobile to base platforms. Available in standard and flange mounting configurations

3591 CES-128 Encryptor System Diagram



(#AT-3591-001) 3591 CES-128 Encryptor, Standard configuration comprising:

3591 CES-128 Encryptor	AT-3590-000-001
Transceiver to 3590/3591 Cable	AT-359X-101
3591 CES-128 Encryptor User Guide	AT-3590-101
3591 Quick Reference Card	AT-3590-102

(#AT-3591-002) 3591 CES-128 Encryptor, Flange Mount configuration comprising:

3591 CES-128 Encryptor (Flange Mount)	AT-3590-000-002
Transceiver to 3590/3591 Cable	AT-359X-101
3591 CES-128 Encryptor User Guide	AT-3590-101
3591 Quick Reference Card	AT-3590-102

Note:

This product is subject to Australian Government Export controls. A signed end-user Declaration must be provided for supply of this product

Cables, handset and key fill software must be ordered separately

3590/3591 ACCESSORIES

Handset H-250/U	AT-2110-ACS-100
Cable, Transceiver to 3590/3591 (Unterminated), 2 m	AT-359X-101
Cable, Power to 3590/3591 (Unterminated), 3 m	AT-359X-102
Cable, Remote Control & Balanced Interface, 2 m	AT-359X-103
Cable, Data Interface 19way MIL to USB A, 2 m	AT-359X-104
Key Management Software (KMS)	AT-ACS-104
Key Fill Software (KFS)	AT-ACS-105
Cable, Data Interface 19way MIL to D9F	AT-2110-ACS-102
Plug, 2way for External DC Input	AT-359X-105
Plug, 14way for Transceiver Interface	AT-359X-106
Plug, 19way for Key Fill/Remote Control/Line Audio Interface	AT-359X-107
User Guide, 3590 AES-256 DV Encryptor	AT-3590-101
Quick Reference Card, 3590 AES-256 DV Encryptor	AT-3590-102
User Guide, 3591 CES-128 Voice Encryptor	AT-3591-101
Quick Reference Card, 3591 CES-128 Voice Encryptor	AT-3591-102

HF Email Software



RC50-C HF Email Software (#AT-RC50-C)

Codan's RC50-C HF Email software provides fast, efficient, error free email capability over HF radio.

Operating in conjunction with Codan's HF Transceivers and RM50 range of Data Modems, the software operates on a standard Windows™ PC using a single USB port with no specialized PC hardware requirements. When installed, the software runs in the background requiring no user interaction.

Standard features:

Adaptive rates up to 19200 bit/s (ISB only) or 9600 bit/s

Compatible with ALE/CALM

Intranet/Internet gateway

NATO interoperable

ISB capable

System requirements:

Windows™ XP Professional SP2, Windows™ 2000

Professional SP4 или Windows™ 7

Intel Pentium IV 800 MHz or better

6 GB or more of free space for email storage

512 MB or more of RAM

CD-ROM drive

POP3/SMTP compliant email client

Access to any commercial POP3/SMTP compliant email server for internet connectivity

Note:

Requires Data Interface Cable (part number AT-2110-ACS-101) for connecting the PC to a 2110M Manpack Transceiver or RM50e HF Data Modem

NSP-M System Programmer Software



NSP-M System Programmer Software CD (English)
 (#AT-ACSM-100)

Software used to profile and firmware upgrade the NGT MR/2110M Transceivers.
 NSP interface cable needs to be ordered separately

NSP-M Cables:

Cable, NSP Interface for NGT	AT-ACS-NSR-102
Cable, NSP Interface for 2110M	AT-2110-ACS-102
Adaptor, USB to DB-9, Serial Port (Note: Not recommended to be used when upgrading transceiver firmware)	AT-ACS-120

Key Management Software



Key Management Software (KMS)
 (#AT-ACS-104)

Key Management Software (KMS) enables you to manage and program encryption keys for Codan's NGT MR/2110M Transceivers and stand-alone encrypted devices, e.g. RM50e HF Data Modem, 3590/3591 Encryptors.



Key Fill Software (KFS)
 (#AT-ACS-105)

Key Fill Software (KFS) enables you to program encryption keys into Codan's NGT MR/2110M Transceivers and stand-alone encryption devices, e.g. RM50e HF Data Modem, 3590/3591 Encryptors.

Cables for NGT MR Key Fill:

Cable, Serial 6-way to D9F	AT-ACS-EX-121
Cable, Data Interface D9F to D15M	AT-ACS-106
Adaptor, USB to DB-9, Serial Port	AT-ACS-120
Cable, Data Interface 19way MIL to USB A	AT-2110-ACS-101
Cable, Data Interface 19way MIL to D9F	AT-2110-ACS-102

Примечание:

This product is subject to Australian Government Export controls. A signed end-user Declaration must be provided for supply of this product

