

AM Rebroadcast Repeater

These channelised repeaters may be used for providing coverage enhancement in poor signal areas for AM Broadcast transmissions. The AMC516 series consists of a multi-channel RF Head-End and RF output power amplifier(s) that can provide transmission through antenna, catenary wire or radiating cable signal distribution systems.

The AMC516 series can be used to receive AM Broadcast signals off-air, and re-generate and amplify them to fixed RF output levels.

Two pairs of RF outputs are provided for multi-bore and multi-zone applications (such as two separate "bores" in a road tunnel). An "audio break-in" feature enables live or pre-recorded messages to interrupt the rebroadcast transmissions, allowing for public address or incident management messages to be broadcast. The audio break-in can be activated independently, allowing local audio to be actioned onto either, or both, of the RF output pairs.

A dual input antenna capability allows for two off-air antenna configurations. If utilised, this feature provides the capability to select optimum input signal strengths determined by AM broadcast source direction, topography, off-air antenna mounting location, etc.

Both the RF Output and Audio Input level gains can be configured on a per-channel basis to cater for specific level setting within a system application. Local RS232 port is provided for firmware upgrading, configuration, alarms and status monitoring.

- Frequency range 531-1710 kHz
- Front panel LED display
- Dual antenna inputs for improved reception
- Independent audio break-in
- Local RS232 configuration
- Alarm output
- Industry-leading compact size

531-1710 kHz

AMC516 Series



AMC516 HEAD END UNIT



PA516 POWER AMPLIFIER UNIT

AM Rebroadcast Repeater

531-1710 kHz

AMC516 Series

AMC516 Head End Unit

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|----------------------------------|---|
| Model Number | AMC516 |
| Frequency Range | 531-1710 kHz (inclusive) |
| RF Channel Spacing | 9 kHz |
| Number of Channels | Up to 16 per Head End |
| Antenna Inputs | 2 (Each AM channel assignable to either Antenna Input) |
| RF Outputs | Up to 4 (Tube 1 Hi, Tube 1 Lo, Tube 2 Hi & Tube 2 Lo) |
| RF Output Level | -20 to 0 dBm (adjustable in 1 dB steps) |
| RF Gain | 50 dB (typ) |
| Audio Break-In Inputs | 2 (Tube 1 Hi/Tube 1 Lo and Tube 2 Hi/Tube 2 Lo) |
| Audio Input | 600 W AMC516 Series balanced. Input impedance >50 kΩ |
| Audio Break-In Control | +12 VDC 12 kW source. Active when Low, switching threshold at +7.5 VDC nom. |
| Indicators | 3 front panel LEDs (Power, Mute, Alarm) |
| Alarms | Single Alarm Output - N.O. or N.C dry relay contacts Alarm States: Channel Modules OK Power Supply OK Temperature OK Rx Input Level OK |
| RF Connectors | N-type (female) on all ports |
| Alarm Connector | DB9 (male) |
| Audio Connectors | Mini XLR (female) |
| Break-In Control (BIF) Connector | DB9 (male) |
| Alarm Connector | DB9 (male) |
| RS232 Port | DB9 (female) |
| Power Supply | 240 VAC ±10% IEC Socket EMC filtered |
| Case Size | 2RU 19" rack mounting |
| Cooling | Forced Air |

PA516A/PA516B RF Power Amplifiers

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| Model Number | PA516 |
| Frequency Range | PA516A 531-1250 kHz (inclusive) PA516B 531-1750 kHz (inclusive) |
| RF Inputs | 1 |
| RF Outputs | 1 |
| Amplifier Type | Class AB Multi-Carrier Power Amplifier (MCPA) |
| RF Output Level | As determined by number of carriers and allowable spurious content of design i.e. +30 dBm per carrier for 6 carriers @ -40 dBc spurious (output level independently adjustable for each carrier) |
| RF Gain | 50 - 62 dB (typ) - adjustable in 1 dB steps |
| Indicators | 4 front panel LEDs (Power, Active, VSWR, Alarm) |
| Alarms | Two Alarm Outputs - N.O. or N.C dry relay contacts on each Alarm States (Minor & Major Alarms): Power Supply OK Temperature OK VSWR OK |
| External Controls | Mute Interlock Mute Control VSWR Reset |
| RF Connectors | N-type (female) on all ports |
| Alarm Connector | DB9 (male) |
| Control Port Connector | DB9 (male) |
| RS232 Port | DB9 (female) |
| Power Supply | 240 VAC ±10% IEC Socket EMC filtered |
| Case Size | 2RU 19" rack mounting |
| Cooling | Forced Air |

Note: These products are available in various configurations. Please contact your nearest RFI Sales Office to discuss specification application requirements.

"As part of our product improvement program, specifications may be subject to change without notice"

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