

FMT12X042-SHH1A1N



Flex Max® FM902 Broadband Trunk Amplifier, 1.2 GHz GaN output (equal trunk & bridger output tilt), 42-54 MHz Bandpass split, 27 dB Upstream gain, RF Module only, 40-90 Vac Powering

- *Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.
- Supports 1.2 GHz Downstream and 204 MHz Upstream bandpass for DOCSIS® 3.1 migration
- Modular RF Electronics package with upgradable frequency split options
- Increased gain to allow drop in upgrades for ≥ 750 MHz spacing
- Mechanically compatible with legacy Flex Net 700/800/900 series and Flex Max 900 and 901 series housings
- Expanded return path bandwidth with support up to 204 MHz
- QAM and analog ADU options for automatic level control and gain hold in the event of pilot loss

Product Classification

| | |
|-------------------------|---|
| Regional Availability | Asia Australia/New Zealand EMEA Latin America North America |
| Product Type | RF amplifier |
| Product Series | FM902 |
| Government Requirements | Build America Buy America (BABA) compliant* |

General Specifications

| | |
|---------------------------|---|
| Technology | 1.2 GHz GaN output |
| Housing | Electronic Module only |
| Location of Manufacturing | Waived per BABA waiver for BEAD Program |

Dimensions

| | |
|--------|---------------------|
| Width | 271.78 mm 10.7 in |
| Depth | 135.89 mm 5.35 in |
| Length | 406.4 mm 16 in |

Electrical Specifications

| | |
|----------------|-----------|
| Upstream Gain | 27 dB |
| Bandpass Split | 42/54 MHz |

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|-------------------------|-----------------------|
| Input Voltage Range, ac | 40–90 V |
| Level Control | 711.00 MHz QAM ALC |
| Reference Slope | 20.2 dB (54-1218 MHz) |

Ordering Tree

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | M | T | 1 | 2 | X | 0 | 8 | 5 | — | S | H | H | 6 | C | 1 | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Key | Technology | Key | Level Control | Key | Powering |
|-------|---|-----|---|-----|--|
| FMT12 | 1.2 GHz GaN Output (Equal Trunk & Bridger Output tilt) | X | Manual Level Control (MLC) | 1 | None (RF Module Only) |
| | | A | ALC with 499.25 MHz | 6 | 2.3A, 90V, 50/60 Hz, High Efficiency |
| Key | Reference Slope | Q | 609.00 MHz QAM ALC | Key | Housing |
| X | 20.2 dB (54–1218 MHz) | S | 711.00 MHz QAM ALC | A | None (RF Module Only) |
| | | | | C | 6-port Flex Max, -20 dB internal test points |
| Key | Bandpass Split | Key | Upstream Gain | Key | Housing Finish |
| 042 | 42/54 MHz | H | 27 dB | 1 | Standard |
| 085 | 85/102 MHz | | | Key | Options |
| 204 | 204/258 MHz | Key | Output Configuration | N | N/A |
| | | H | Dedicated Trunk with two bridger outputs—user- configurable to four outputs | | |

Environmental Specifications

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|-----------------------|--------------------------------------|
| Operating Temperature | -40 °C to +60 °C (-40 °F to +140 °F) |
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Packaging and Weights

| | |
|-------------|------------------|
| Weight, net | 7.257 kg 16 lb |
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Regulatory Compliance/Certifications

| Agency | Classification |
|------------|-----------------------------------|
| CHINA-ROHS | Above maximum concentration value |
| ROHS | Compliant/Exempted |
| UK-ROHS | Compliant/Exempted |

