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Data Sheet

August 13, 2026

L3HARRIS

L3Harris AM-7223/URC

The L3Harris AM-7223/URC is a radio frequency amplifier engineered for secure, multi-channel transmission in military and tactical communication systems. This equipment integrates built-in switching networks, diagnostic capabilities, and precision power management to operate reliably in demanding environments. High-voltage supply: +2000 VDC (generated by internal Rectifier/Bleeder PWB Assembly for Tube Assy) Rail regulation tolerance: $\pm 2.5\%$ recommended (external regulation required) RF Performance Load VSWR: 2:1 for 85% of band, 3:1 maximum; output power degradation at 3:1 VSWR: 1.2 dB typical RF Switch Performance



MODEL

L3Harris AM-7223/URC

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

AM-7223/URC

LISTING

<https://aumictechlabs.com/products/am-7223-urc-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The L3Harris AM-7223/URC is a radio frequency amplifier engineered for secure, multi-channel transmission in military and tactical communication systems. This equipment integrates built-in switching networks, diagnostic capabilities, and precision power management to operate reliably in demanding environments. Technical Specifications Power Supply & Rail Requirements Primary rail: +8.25 VDC at 3 A typical (at P1dB) Secondary rail: -12 VDC at 20 mA typical (at P1dB) High-voltage supply: +2000 VDC (generated by internal Rectifier/Bleeder PWB Assembly for Tube Assy) System supply: +13.5 VDC Input power: 115 VAC, 400 Hz Rail regulation tolerance: $\pm 2.5\%$

recommended (external regulation required) RF Performance Small signal gain: 34.0 dB average at 25°C Saturated output power: -2.0 to +4.0 dBm typical Harmonic output level: better than -15 dBc @ P1dB Third order intermodulation (two-tone): +39 dBm typical Input/Output VSWR: 2:1 Load VSWR: 2:1 for 85% of band, 3:1 maximum; output power degradation at 3:1 VSWR: 1.2 dB typical RF Switch Performance Switching speed: 80 ns typical Video leakage: <-50 dBm Isolation: better than 10 dB Non-reflective ports PRF switching time: 500 kHz maximum Modulation ON/OFF timing: 60 ns typical Key Features Dual-output switch network configured for separate antenna element polarizations in phased array systems Automatic status checking with manual and automatic diagnostic bit (BIT) routines Manual and automatic tuning procedures Built-in test capability for troubleshooting Typical Applications Military and tactical secure communications Multi-channel RF transmission systems Phased array antenna systems RF-355 system integration Compatibility & Integration The AM-7223/URC operates as part of larger L3Harris communication architectures. Technical manuals (T.O. 31R2-2URC-101, T.O. 31R2-2URC-103) provide detailed on-equipment operation and maintenance procedures.

Features & description

From manufacturer datasheet

Features

- JETDS AM-7223/URC; AN/URC-119(V)

AM7223URC Characteristics / Specifications

PARAMETER	VALUE
Model	AM-7223/URC
Manufacturer	Harris Corporation (L3Harris lineage) / Joint Electronics Type Designation 80058
Instrument Type	HF Linear Power Amplifier
Series	AN/URC-119
Alias	AM-7223/URC; AM-7223 URC; RF-7223L; RF-355; 10086-0000
JETDS	AM-7223/URC
Host Set	AN/URC-119(V)
Companion Transceiver	RT-1446/URC (Harris RF-350)
Frequency Range	1.6 MHz to 29.9 MHz
Impedance	50 ohm
RF Output PEP	500 W PEP two-tone when driven by the companion transceiver
RF Output CW	250 W continuous average with CW or single-tone input
RF Drive	about 65 W for full power output (Harris RF-355 class listings)
Tune Time	automatic tune 10 s maximum
Circuit	solid state
Control	automatic or manual
AC Input NSN	110 Vac nominal, single phase
DC Input NSN	28 Vdc nominal
Height NSN	7.000 in nominal
Width NSN	16.500 in nominal
Length NSN	19.500 in nominal
Weight Listing	about 78 lb (Harris RF-355 class listings)
Installation	rack
NSN	5996-01-162-3312
Technical Order Operate	31R2-2URC-101 pages 3-1 through 4-8 class

PARAMETER	VALUE
Technical Order Fault	31R2-2URC-101 pages 6-2 through 6-29 class
Self Test	URC-119 LPA self-test
Related LPA	AM-7224/URC with PP-7913/URC isadifferent amplifier (TO 31R2-2URC-121)
Cage Harris	14304
Duty	SSB PEP and CW within 500 W / 250 W ratings
Protection	cooling-air and related shutdowns (RF-355 class descriptions)
Connectors	RF 50 ohm; AC/DC; control to RT-1446
Documentation	TO 31R2-2URC-101 and TO 31R2-2URC-103 Notes Specs from NSN 5996-01-162-3312, JETDS AM-7223/URC, AN/URC-119 pairing with RT-1446, and Harris RF-355 ratings (500 W PEP, 250 W CW). Confirm TO configuration, 110 Vac vs 28 Vdc, and that the unit is not AM-7224/URC.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Model	AM-7223/URC
Manufacturer	Harris Corporation (L3Harris lineage) / Joint Electronics Type Designation 80058
Instrument Type	HF Linear Power Amplifier
Specifications	
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Specifications

PARAMETER	VALUE
Control	automatic or manual
AC Input NSN	110 Vac nominal, single phase
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Specifications

PARAMETER	VALUE
Height NSN	7.000 in nominal
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PARAMETER	VALUE
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Installation	rack
NSN	5996-01-162-3312

Specifications

PARAMETER	VALUE
Technical Order Operate	31R2-2URC-101 pages 3-1 through 4-8 class
Technical Order Fault	31R2-2URC-101 pages 6-2 through 6-29 class
Self Test	URC-119 LPA self-test

Specifications

PARAMETER	VALUE
Related LPA	AM-7224/URC with PP-7913/URC isadifferent amplifier (TO 31R2-2URC-121)
Cage Harris	14304
Duty	SSB PEP and CW within 500 W / 250 W ratings

Specifications

PARAMETER	VALUE
Protection	cooling-air and related shutdowns (RF-355 class descriptions)
Connectors	RF 50 ohm; AC/DC; control to RT-1446
Documentation	TO 31R2-2URC-101 and TO 31R2-2URC-103

Notes

Specs from NSN 5996-01-162-3312, JETDS AM-7223/URC, AN/URC-119 pairing with RT-1446, and Harris RF-355 ratings (500 W PEP, 250 W CW). Confirm TO configuration, 110 Vac vs 28 Vdc, and that the unit is not AM-7224/URC.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.