

ARRIS TM1602A

DOCSIS 3.0 EMTA

FEATURES

- 2 lines of primary line voice over (VoIP)
- Ultra-high speed data access
- Multiple battery pack options
- 24x8 bonded channel cable environment
- Subscriber data services as high as 960 Mbps

PRODUCT SPECIFICATIONS

PHYSICAL

Operating Temperature °F (°C)

32 to 104 (0 to 40)

Operating Relative Humidity

5-95% (non-condensing)

Storage Temperature °F (°C)

-40 to 158 (-40 to 70)

Dimensions (H x W x D) in.

TM1602A: 7.1 x 1.8 x 7.1

TM1602G: 9.1 x 2.2 x 7.0

TM1602 w/ 8-cell: 9.7 x 2.2 x 7.0

Weight (lbs.)

TM1602A: 1.11

TM1602G: 1.39

Battery Pack Weights (lbs.)

4-Hr Pack: Li-ion 2.2 AH Capacity, 0.25

8-Hr Pack: Li-ion 4.4 AH Capacity, 0.50

12-Hr Pack: Li-ion 6.6 AH Capacity, 0.75

16-Hr Pack: Li-ion 8.8 AH Capacity, 1.0

Battery Storage Temperature °F (°C)

-4 to 140 (-20 to 60)

Storage above 77°F (25°C) reduces battery life

Battery Telemetry

AC Fail, Battery Low, Battery Missing,
Replace Battery

Diagnostic LEDs

Power, US/DS, Online, Tel1, Tel2,
Battery (TM1602G only)





ARRIS TM1602A

DOCSIS 3.0 CABLE MODEM

PRODUCT SPECIFICATIONS

INTERFACES

RF Interface	External 75 ohm 'F' type connector
Data Interface	10/100/1000 Base-T Ethernet RJ-45
Telephony Interface	Two (2) RJ-11 jacks
Battery Interface	Custom male connector, rectangular, 2mm
Input Voltage (nominal)	115 VAC, 60 Hz

TELEPHONY

Supervisory Voltage	48 VDC nominal
Maximum Loop Length to CPE	1000 ft (305M) of 26 AWG (0.4 mm) wire
Ringing Load Capacity	10 REN total; 5 per line
Provisionable High Loop Current Mode	Yes (40mA constant current source)
Telcordia™ GR 1089 Tested	Yes
Programmable Country Interface	Yes (support for multiple country templates)

RF DOWNSTREAM

Frequency Range (MHz)	108-1002 (edge to edge)
Bonded Channels	Up to 16 (24 with separate downstream license)
Tuner Configuration	Full capture tuning range
Modulation (QAM)	64 or 256
Data Rate (Mbps Max.)	Up to 640 (960 with 24 downstream license)
RF Input Sensitivity Level (dBmV)	-15 to +15
Carrier Bandwidth	6 MHz
MoCA® Immunity Filter	Yes



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DOCSIS 3.0 CABLE MODEM

PRODUCT SPECIFICATIONS

RF UPSTREAM

Frequency Range (MHz)	5-42 (A/NA, G/NA) or 5-85 (G/NA-85 versions)
Bonded Channels	Up to 4 (8 with separate upstream license)
Modulation	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM, 128 QAM (S-CDMA only)
Modulation Bandwidth (kHz)	TDMA: 200, 400, 800, 1600, 3200, 6400 S-CDMA: 1600, 3200, 6400
Data Rate (Mbps Max.)	Up to 120 (240 with 8 upstream license)
RF Input Sensitivity Level (dBmV - one channel)	TDMA: +17-61 (QPSK) +17-58 (8 QAM, 16 QAM) +17-57 (32 QAM, 64 QAM) S-CDMA: +17-56 (all modulations)
Automatic Level Adjust	Yes
Frequency Stability (kHz)	±5
Output Impedance (Ohms)	75

STANDARDS

DOCSIS 3.0 Certified	UL® 60950/CB	RoHS/WEEE
PacketCable 1.0, 1.5, 2.0 Compliant	FCC Part 15 Class B/ ICES-003	G.711, 64 kbps, µ-law/ A-law encoded speech
IEEE 802.3, 802.3ab	Telcordia™ GR-1089 Lightning/Surge	Enhanced codecs: G.722, G.726, G.728, G.729E
RFC3261 Legacy SIP	Telcordia™ GR-63 NEBS	T.38 Fax Relay
ITU-T K.21		