

# ARRIS TM822

**DOCSIS 3.0 CABLE MODEM**

## FEATURES

- DOCSIS® 3.0 certified
- EuroDOCSIS® 3.0 compliant
- PacketCable® 1.0/1.5 compliant and EuroPacketCable® 1.0/1.5 compliant
- Upgradeable to PacketCable® 2.0
- Dual-mode capable device for maximum flexibility across DOCSIS® and EuroDOCSIS® based networks
- Flexible 8x4 downstream/upstream channel bonding
- Backward compatible with DOCSIS 1.0, 1.1, and 2.0
- Up to two lanes of carrier-grade VoIP
- Multiple Protocol Support: PacketCable (NCS) or Session Initiation Protocol (SIP)
- IPv4 and IPv6 modes for DOCSIS CM
- 10/100/1000 Base-T Ethernet
- 6, 8, 12, 18, and 24 hour battery options available (TM822G only)
- Simplified interoperability through PacketACE™ config file editor



## PRODUCT SPECIFICATIONS

### PHYSICAL

<b>Operating Temperature °F (°C)</b>	32 to 122 (0 to 50)
<b>Operating Relative Humidity</b>	5-95% (Non-condensing)
<b>Storage Temperature °F (°C)</b>	-40 to 158 (-40 to 70)
<b>Dimensions (H x W x D) in.</b>	7.3 x 1.7 x 6.2
<b>Weight (lbs.)</b>	1.0
<b>Diagnostic LEDs</b>	Power, US/DS, Online, Link, Tel 1, Tel 2



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### PRODUCT SPECIFICATIONS

#### INTERFACES

RF Interface	External 75 ohm 'F' type connector
Data Interface	10/100/1000 Base-T Ethernet (RJ-45 connector)
Telephony Interface	2 lines; RJ-11
Input Voltage (nominal)	115-240 VAC 50.60 Hz
Power Switch Equipped	On TM822S model only
Power Consumption (W)	5.5 (idle)

#### TELEPHONY

Supervisory Voltage	48V DC nominal
Maximum Loop Length to CPE	1000 ft (305M) of 26 AWG (0.4mm) wire
Ringing Load Capacity	10 REN total; 5 per line
Provisionable High Loop Current Mode	Yes
Telcordia™ GR 1089 (Lightning and Power Surge) Tested	Yes
Programmable Interface for Worldwide Applications	Yes

#### RF DOWNSTREAM

Frequency Range (MHz)	108-1002 (edge-to-edge)
Bonded Channels	Up to 8
Number of Tuners	2
Capture Bandwidth (MHz)	96 (per tuner, 192 MHz total)
Modulation (QAM)	64 or 256
Data Rate (Mbps, Theoretical)	Up to 343
RF Input Sensitivity Level (dBmV)	-15 to +15
Carrier Bandwidth	6 MHz (DOCSIS mode) or 8 MHz (EuroDOCSIS mode)
Embedded MoCA® Immunity Filter	Yes



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#### RF UPSTREAM

Frequency Range (MHz)	5-42 (DOCSIS mode) or 5-65 (EuroDOCSIS mode)
Bonded Channels	Up to 4
Modulation	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM, 128 QAM (S-CDMA)
Modulation Bandwidth (kHz)	200, 400, 800, 1600, 3200, 6400 (TDMA) 1600, 3200, 6400 (S-CDMA)
Data Rate (Mbps, Theoretical)	Up to 122
RF Output Level (dBmV - one channel)	TDMA: +17 to 61 (QPSK) +17 to 58 (8 QAM, 16 QAM) +17 to 57 (32 QAM, 64 QAM) S-CDMA: +17 to 56 (all modulations)
Automatic Level Adjust	Yes
Frequency Stability (kHz)	±5
Output Impedance (Ohms) 48V DC nominal	75

#### RF UPSTREAM

DOCSIS 3.0 / EuroDOCSIS 3.0	RoHS, WEEE
PacketCable 1.0 and 1.5	IEEE 802.3, IEEE 802.3ab
UL® 60950	RFC3261 SIP: Session Initiation Protocol
FCC Part 15 Class B	Codec: G.711, 64 kbps, $\mu$ -law and A-law encoded speech
CE	Enhanced codec support (G.726, G.728, G.729E)
CB	T.38 Fax Relay