

ARRIS CM820B

DOCSIS 3.0 8X4 ULTRA HIGH SPEED CABLE MODEM

- 8x4 Downstream/Upstream Channel Bonding with superior Throughput
- Dual 96MHz wide Downstream Tuners
- Backwards compatible with DOCSIS 1.0, 1.1, and 2.0
- Backwards compatible with DOCSIS CM Layer
- 10/100/1000 Base-T Ethernet Interface
- Low Power Consumption
- Simplified Interoperability through PacketACE Configuration File Editor



SPECIFICATIONS

PHYSICAL	
Operating Temperature °F (°C)	32 to 104 (0 to 40)
Operating Relative Humidity (Min-Max)	5-95% (non-condensing)
Storage Temperature °F (°C)	-40 to 158 (-40 to 70)
Dimensions (H x W x D) in. (cm)	6.2 x 1.7 x 5.7 (16.3 x 5.3 x 14.5)
Excludes F-connector	
Weight lbs (kg)	0.81 (0.37)
Diagnostic LEDs	Power, DS, US, Online, Link
INTERFACES	
RF Interface	External 75Ω 'F' type connector
Data Interface	10/100/1000 Base-T Ethernet RJ-45
Input Voltage (nominal)	115-240 VAC 50/60 Hz (A, B, S models) 100 VAC 50/60 Hz (C model)
Power On/Off Switch	Yes (S model)
Power Consumption (W)	5 (idle), 5.5 (max.) (A, B, S models) 6 (idle), 6.5 (max.) (C model)
RF DOWNSTREAM	
Frequency Range (MHz)	108-1002
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) Note: Maximum raw DOCSIS / EuroDOCSIS rates; actual data throughput is less due to overhead, configuration, and RF conditions.	Up to 343 (A, C models) Up to 444 (B, S models)
RF Input Sensitivity Level (dBmV)	-15 to +15 (A, C models) -17 to +17 (B, S models)
Carrier Bandwidth (MHz)	6 (A, C models) 8 (B, S models)
MoCA® Immunity Filter	Embedded
RF UPSTREAM	
Frequency Range (MHz)	5-42 (A model) 5-65 (B, C, S models)
Bonded Channels	Up to 4
Modulation	QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM (S-CDMA only)
Modulation Bandwidth (kHz)	TDMA: 200, 400, 800, 1600, 3200, 6400 S-CDMA: 1600, 3200, 6400
Data Rate (Mbps, Theoretical) Note: Maximum raw DOCSIS / EuroDOCSIS rates; actual data throughput is less due to overhead, configuration, and RF conditions.	Up to 122
RF Output Level (dBmV – one channel) Note: S-CDMA max output reduced 3dB when transmitting 2 or more channels.	TDMA: +17 to 61 (QPSK) -17 to 58 (8QAM, 16QAM) +17 to 57 (32QAM, 64QAM) S-CDMA: +17 to +56 (all modulations)
Automatic Level Adjust	Yes
Frequency Stability (kHz)	±5
Output Impedance (Ω)	75

STANDARDS

DOCSIS® 3.0	PSE
EuroDOCSIS® 3.0	VCCI
UL® 60950	RoHS
FCC Part 15 Class B	WEEE
CE, CB	IEEE 802.3, IEEE 802.3ab

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
793987	Touchstone CM820A/NA DOCSIS 3.0 8x4 CM with integrated 100-240 VAC, 50/60 HZ power supply with 6 ft NEMA 1-15 power cord. Includes Quick Install Guide and Ethernet Cable
793988	Touchstone CM820A/CE DOCSIS 3.0 8x4 CM with integrated 100-240 VAC, 50/60 Hz power supply with 6 ft CEE 7/16 Euro power cord. Includes Quick Install Guide and Ethernet Cable
793989	Touchstone CM820B/CE Dual-Mode EuroDOCSIS/DOCSIS 3.0 8x4 CM with integrated 100-240 VAC, 50/60 Hz power supply with 6 ft CEE 7/16 Euro power cord. Includes Quick Install Guide and Ethernet Cable
793990	Touchstone CM820S/CE Dual Mode EuroDOCSIS/DOCSIS 3.0 8x4 CM with integrated 100-240 VAC, 50/60 Hz power supply with 6 ft CEE 7/16 Euro power cord and ON/OFF switch. Includes Quick Install Guide and Ethernet Cable.
793991	Touchstone CM820C/JA DOCSIS 3.0 8x4 CM for Japan, with integrated 100-240 VAC, 50/60 Hz power supply with 6 ft JIS 8303 (Class II) power cord. Includes Quick Install Guide.