Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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INNOVATOR IN ELECTRONICS

SEM2411 Series
SEM2411X
SEM2411D
SEM2411DX
SEM2411LC

High Speed
Spread Spectrum
Ethernet Radio Modem
Family

Features:
- *High Speed: Up to 1Mbps throughput*
- *Network Ethernet devices (sensors, PLCs, computers) wirelessly*
- *Long Range: 1.5 miles using a 4" unity-gain dipole antenna. Easily extended using gain antennas.*
- *Proven frequency hopping technology*
- *Standard Ethernet 10/100BaseT interface*

Benefits:
- *Excellent immunity to jamming and multi-path fading*
- *No user site license required anywhere in the world*
- *Packaged for rugged industrial use*
- *30OC to + 70OC operation*
- *Allows for deployment in hazardous locations*
- *Low cost version available*

.The SEM2411 series of products are very high speed/long range wireless networking products from Murata. Operating in the globally license-free 2.4GHz band, the SEM products are designed to provide high-speed wireless connectivity between Ethernet devices. Typical uses include Ethernet bridging, SCADA networks, PLC networking, and other industrial automation or data collection applications. There is also a low cost version available.

SEM2411D	SEM2411X/DX	SEM2411 LC	SEM2411 HL

Rail Mount
The SEM2411/D/X offers a DIN-rail mount version, making connection to PLCs or other automation devices a snap. The entire SEM2411 product family is Class I Division 2 certified, allowing deployment in hazardous locations.

NEMA 4X Remote Assembly
The SEM2411/D/X puts the radio in a NEMA 4X remote assembly that can be located up to 300 feet from the Ethernet connection. This allows optimal radio placement without the need for long RF cable runs.

Low Cost
The SEM2411LC can be deployed as a low cost remote bridge using a standard SEM2411 as the base bridge. The SEM2411LC can function only as a slave device and must communicate with a standard SEM241. A SEM2411 can support up to 62 SEM2411LCs.

The SEM2411LC radio is housed in a NEMA 4X remote assembly that can be located up to 100 feet from the Ethernet connection. This allows optimal radio placement without the need for long RF cable runs. The SEM2411LC remote radio assembly includes an integral 6dB patch antenna, removing the need for expensive, external antennas.

The SEM2411LC offers 1 Mbps of data throughput, either point-to-point or point-to-multipoint.

Hazardous Location, Class I Div I
SEM2411 HL (hazardous location) products are ready to be deployed in hazardous locations. These Class I Div I rated solutions are idela for oil and gas applications. The only access hole that comes on the box is the antenna connection on top. The customer then chooses where to drill for power, data and/or control conduit access to maximize installation flexibility.

The SEM 2411 HL products can function as high speed bridge between two 10/100BaseT Ethernet networks or provide wireless connectivity between an Ethernet master bridge and multiple Ethernet remote bridges.

SEM2411 HL provides a 1,23Mbps data rate. SEM products ensure errorless data via CRC error checking and ARQ (automatic retransmission of errored packets).

SEM2411 series of products use Murata fourth generation proprietary frequency hopping technology. Major industrial powerhouses such as Group Schneider, Siemens, and GE have learned they can depend on Murata products for their customers. SEM products offer extraordinary data throughput combined with outstanding range, coverage, and link reliability. The SEM products can operate easily in extended range applications with gain antennas.

The SEM2411 series can function as a high speed bridge between two 10/100BaseT Ethernet networks (see figure 1). SEM2411 series products can also provide wireless connectivity between an Ethernet base station and multiple Ethernet remote modems (see figure 2). Gain antennas can be used to extend range and coverage. The SEM2411 series products offer 1 Mbps of data throughput, either point-to-point or multi-point. SEM2411 products ensure errorless data via CRC error checking and ARQ (automatic retransmission of errored packets).
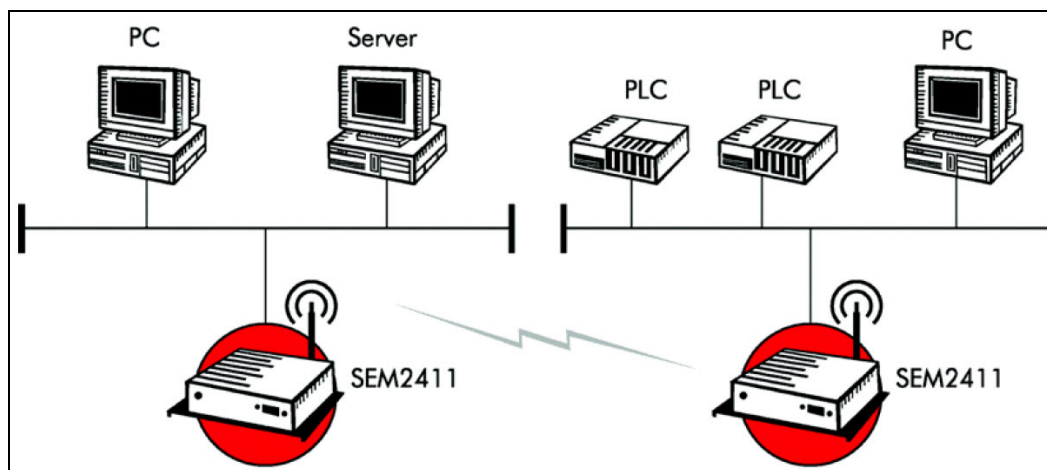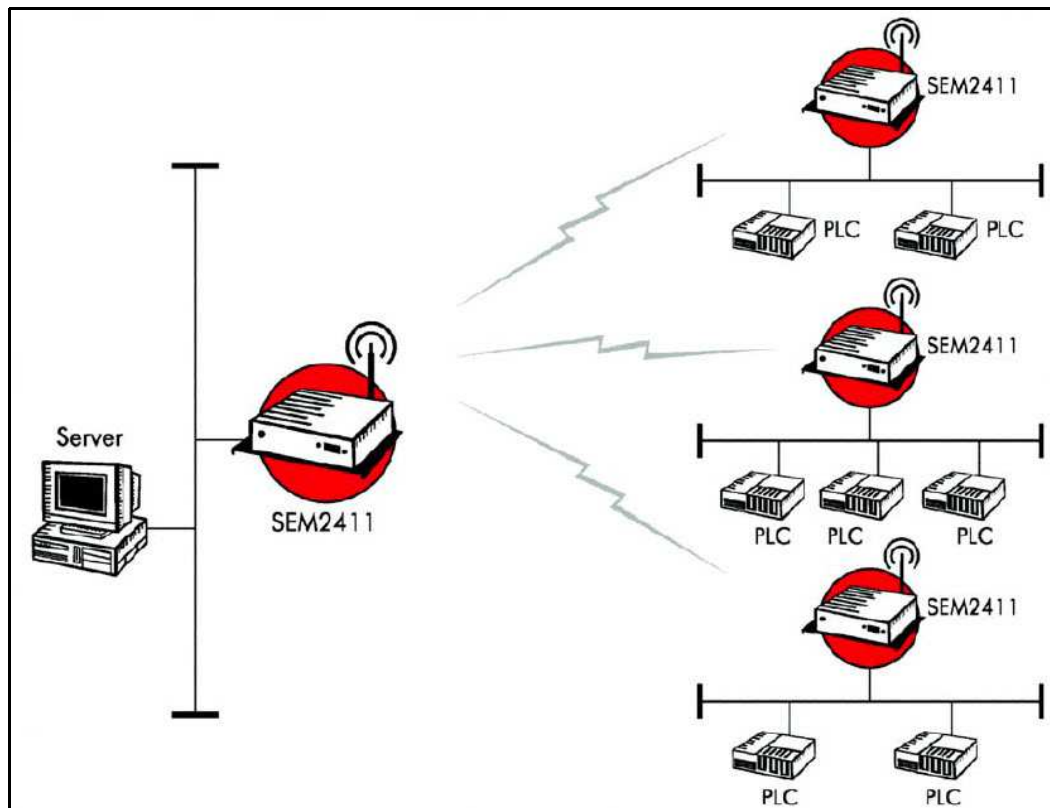
Figure 1

Figure 2

www.murata.com

	SEM2411	SEM2411X	SEM2411D	SEM2411DX	SEM2422 LC
Data Throughput	1Mbps				
Total Available Over-the-air Bandwidth	1.23 Mbps				
Interface	10/100BaseT				
Network Topologies	Point-to-point and multipoint				
Repeater	Use HN-2010				-
Frequency Range (Multiple 803.11b-friendly hopsets available)	2401MHz - 2471MHz US & ETSI 2406MHz - 2445MHz France				2401MHz - 2471MHz US & ETSI 2400MHz - 2452MHz France
RF Modulation	GFSK				
RF Output Power	+8dBm / +18dBm at the RF Connector Software Selectable				+20dBm / +30dBm (includes antenna gain) software selectable
Power	+9Vdc - +30Vdc	+12Vdc - +30Vdc	+9Vdc - +30Vdc	+12Vdc - +30Vdc	+9VDC
Enclosure Material	Aluminum	Aluminum (network interface unit) UV stabilized polycarbonate (remote radio unit)	ABS	ABS (network interface unit) UV stabilized polycarbonate (remote radio unit)	
Enclosure Size	201 x 144 x 53	201 x 144 x 53 (network interface unit) 130 x 79 x 35 (remote radio unit)	140 x 118 x 48	140 x 118 x 48 (network interface unit) 130 x 79 x 35 (remote radio unit)	130 x 130 x 60 (network interface unit) 130 x 79 x 35 (remote radio unit)
Operating Temperature	0ºC to +70ºC	0ºC to +70ºC (network interface unit) -40ºC to +70ºC (remote radio unit)	-30ºC to +70ºC	-30ºC to +70ºC (network interface unit) -40ºC to +70ºC (remote radio unit)	
Certifications	FCC, IC, CE Marked, UL Class I Div 2				FCC, IC, CE marked

	SEM2411D/X/DX	SEM2411 LC
Power	2-Terminal Connector	
Ethernet	RJ-45	
Configuration Port	RJ-11	
Antenna	Reverse TNC	12dBi internal patch

Power
Ethernet Transmit
Ethernet Receive
Link Status
Collision
RF Link