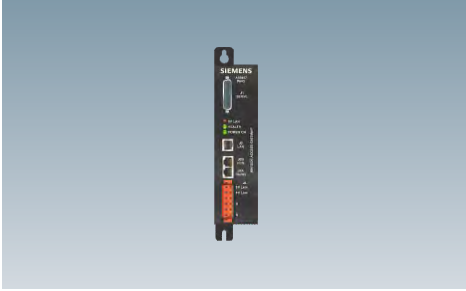


Wayside Wireless Pole Line Products



WAG Series
Wireless Access Gateways

B51 - B52



ESSR Series
Ethernet Spread Spectrum Radios

B53 - B54



HD Link Modules

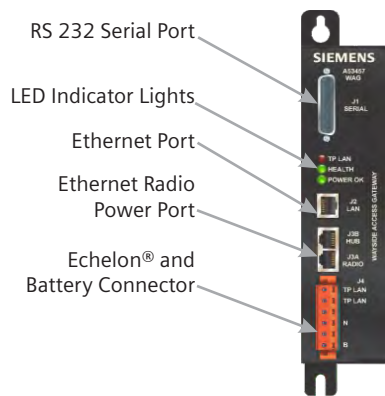
B55 - B56





WAG
Series
Wireless Access Gateways

Overview



Model A53355 ESSR Series Ethernet Spread Spectrum Radio shown for reference purposes only! Actual unit selected may vary in mounting and features.

SIEMENS WAG Series Wireless Access Gateway offers a reliable and simple method of attaching legacy field devices to your corporate WAN without breaking the bank.

WAG Series converts Echelon® messages to industry standard ethernet messages. This connectivity allows the WAG to communicate to ethernet networks through other wireless pole line products such as the HD / Link module and the Ethernet Spread Spectrum Radio (ESSR).

WAG Series connects vital and non-vital field equipment using industry standard protocols and off the shelf IT hardware.

Features

- Echelon®, ethernet and serial communications media converter
- Isolated from battery supply
- Advanced Train Control Systems (ATCS) Specification 200, Version 4.0 Communications Systems Architecture addressable for intelligent message routing
- Connects communications between various Grade Crossing Control Systems Products such as Grade Crossing Predictor (GCP) series, Intelligent Lights Out Detectors (iLod) and Analyzer / Event Recorders (SEAR II) series to Wayside Wireless Pole Line Products such as HD / Link Module and Ethernet Spread Spectrum Radios (ESSR)

WAG Series units can be configured individually utilizing Microsoft® HyperTerminal, or can be configured globally over network utilizing Telnet software.

Embedded configuration tools and simple to use menu selections make it easy to set up, run diagnostics and create detailed operational logs either locally or remotely.

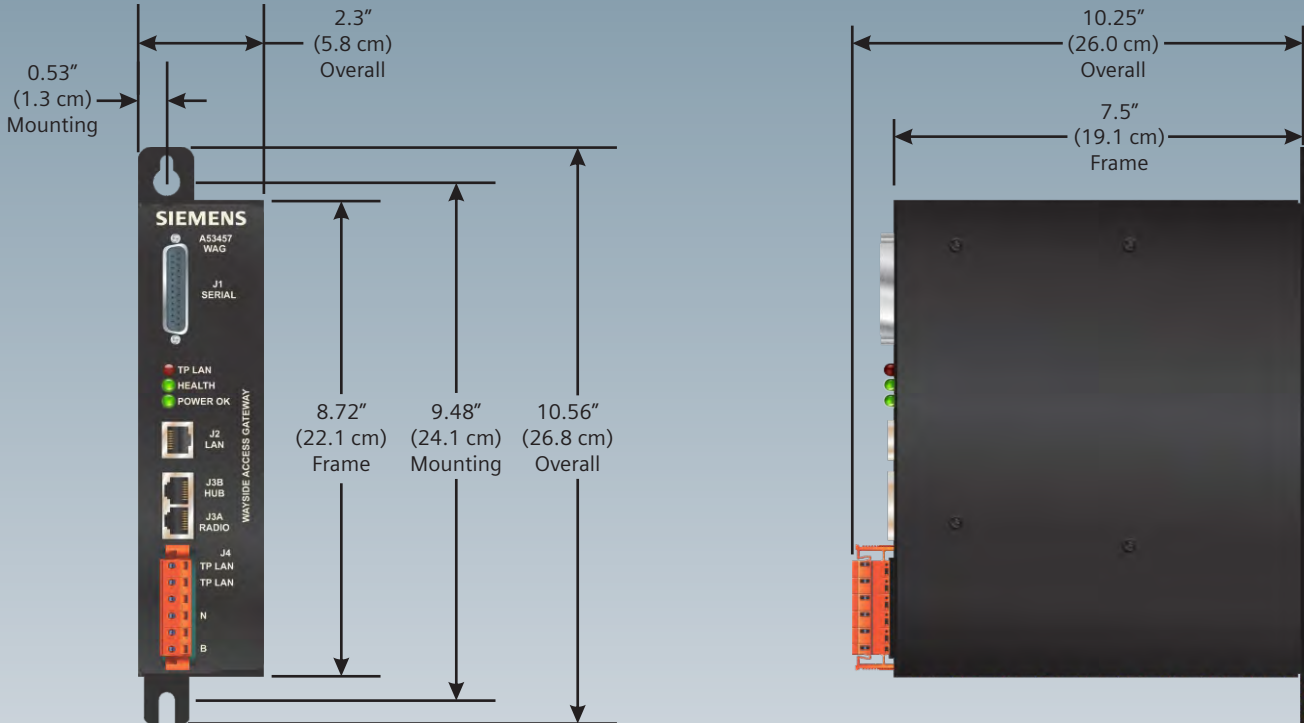
NYK:9000534570002



Wayside Systems
Wayside Wireless Pole Line Products

- Converts Echelon® messages to ethernet messages
- Easily mountable on standard relay racks, instrument house backboards or can even be shelf mounted when removing included mounting bracket
- Weight is approx. 4 lbs. (1.81 kgs.) including connectors
- Operates in -40° F to +160° F (-40°C to +70°C) @ up to 95% Non-Condensing Relative Humidity
- (1) RS 232 Serial Port at 115 Kbps transfer rate
- (1) Ethernet radio port at 100 Mbps transfer rate
- (1) Echelon® port at 1.25 Mbps transfer rate
- 12 VDC, 60 Hz power voltage
- ATCS Specification 200, Version 4.0 (Type 3 or Type 7) addressability
- Includes network converter module

Applicable for A53457 WAG Series Wireless Access Gateways

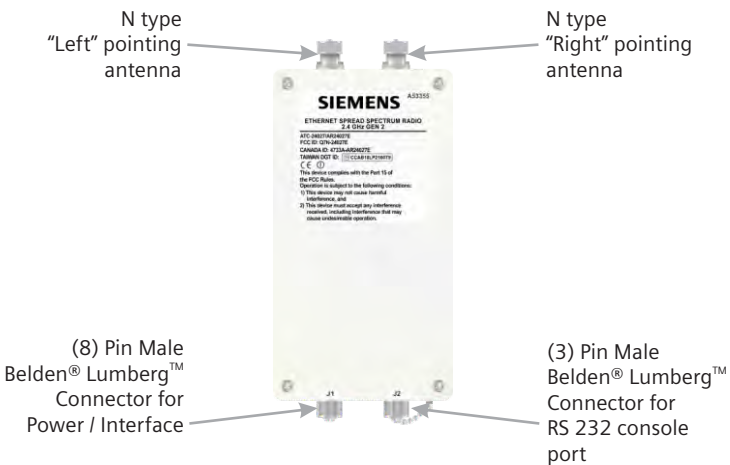




ESSR Series

Ethernet Spread Spectrum Radios

Overview



Model A53355 ESSR Series Ethernet Spread Spectrum Radio shown for reference purposes only! Actual unit selected may vary in mounting and features.

SIEMENS ESSR Series Ethernet Spread Spectrum Radio Series offers the ability to establish point to point, point to multipoint, linear, tree and roaming networks without the expense, labor and time involved in installing cables.

ESSR Series connects vital and non-vital field equipment using industry standard protocols and off the shelf IT hardware. Can be used as a stand alone direct connection through ethernet protocols or as a bridge to serial or Echelon® connections when used in conjunction with a **SIEMENS** WAG Series Wireless Access Gateway unit.

Able to join multiple segment networks across multiple channels without the concern of interfering with each other.

Able to access data logs as well as configure networks easily either through a laptop connected to any node or monitor locations with SNMP based systems.

Features

- Radio frequency rate of up to 2.7 Mbps
- Secure RF protocols for vital train control systems
- Intelligent routing for vital, high and normal priority level messages
- Low latency messaging for critical point to point applications
- Intelligent tools for spectrum and network analysis
- Single hop ranges of up to 80 km with clear line of sight

ESSR Series units can be configured individually for data rate and minimum received signal level to suit application requirements. Can also be configured to accommodate the time division duplex cycle time to optimize network throughput and latency.

ESSR Series units can be deployed one node at a time and can be extended at any time by adding additional nodes. Encased in a weather resistant housing that allows the ESSR Series unit to be mounted in close proximity to transmission antenna without the concern of RF loss due to long, expensive cabling.

SIEMENS Part Number	Signal Bandwidth	Options	Mounting Bracket	Power Source	Channel Blocking	Encryption Type		Firmware Configuration		
						DES 56	AES 128	ATC	TDD	Cluster Hub
NYK:9000533550001	4.6 MHz	Tree	V Pole			X			X	
NYK:9000533550002	4.6 MHz		V Pole			X		X		
NYK:9000533550003	4.6 MHz		V Pole		X	X		X		
NYK:9000533550004	4.6 MHz	Tree	V Pole			X			X	
NYK:9000533550005	4.6 MHz		V Pole			X				X
NYK:9000533550006	4.6 MHz		V Pole	AC Inserter Euro Cord		X				X
NYK:9000533550007	4.6 MHz	Tree / RM	V Pole		X	X			X	
NYK:9000533550008	4.6 MHz	Tree	V Pole		X		X		X	
NYK:9000533550013	AC Inserter Euro Cord		V Pole				X			X
NYK:9000533550014		Tree / RM	V Pole				X		X	
NYK:9000533550015			V Pole	AC Inserter US Cord	X		X			X
NYK:9000533550016			V Pole	AC Inserter US Cord	X	X				X
NYK:9000533550009			V Pole				X	X		
NYK:9000533550010			V Pole				X	X		
NYK:9000533550011		Tree	V Pole	AC Inserter US Cord	X		X		X	
NYK:9000533550012			V Pole		X		X			X
NYK:9000533550017				DC Inserter w/ Pigtail		X				X
NYK:9000533550018		Tree	V Pole	AC Inserter Euro Cord		X			X	
NYK:9000533550019		Tree / RM	V Pole	AC Inserter US Cord	X	X			X	
NYK:9000533550020				AC Inserter Euro Cord	X	X				X
NYK:9000533550021				AC Inserter Euro Cord		X				X
NYK:9000533550022						X				X
NYK:9000533550023						X				X
NYK:9000533550024				DC Inserter w/ Pigtail		X				X

WaySide Systems
WaySide Wireless Pole Line Products



HD Link Modules

Overview



*Model A53201 HD Link Module shown for reference purposes only!
Actual unit selected may vary in mounting and features.*

SIEMENS HD Link™ is designed to be used in conjunction with an Ethernet Spread Spectrum Radio (ESSR), in order to function in a communications network system as a vital I/O unit.

An HD Link™ system provides the capability to read the state of a vital input at one location, typically a relay contact, and use this input state to drive a vital output, typically a relay coil, at the same or another location.

NYK:9000532010004



- Weight is approx. 4 lbs. (1.81 kgs.)
- Operates in -40° F to +160° F (-40°C to +70°C) @ up to 95% Non-Condensing Relative Humidity
- (4) I/O circuits
- NO serial EPROM

NYK:9000532010008



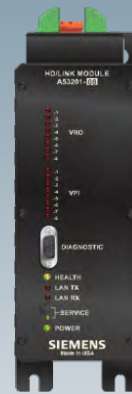
- Weight is approx. 4 lbs. (1.81 kgs.)
- Operates in -40° F to +160° F (-40°C to +70°C) @ up to 95% Non-Condensing Relative Humidity
- (8) I/O circuits
- NO serial EPROM

NYK:9000532010014



- Weight is approx. 4.2 lbs. (1.91 kgs.)
- Operates in -40° F to +160° F (-40°C to +70°C) @ up to 95% Non-Condensing Relative Humidity
- (4) I/O circuits
- (1) 9000-53122-0001 serial EPROM

NYK:9000532010018



- Weight is approx. 4.2 lbs. (1.91 kgs.)
- Operates in -40° F to +160° F (-40°C to +70°C) @ up to 95% Non-Condensing Relative Humidity
- (8) I/O circuits
- (1) 9000-53122-0001 serial EPROM