Indoor wireless Base Station
External Antenna

Performances and quality at low cost

The CHR1000 product line includes models with 1 or 2 radio modules and represents the Chronolink solution for indoor applications. Thanks to their unobtrusive and elegant design, CHR1000 devices can be installed in a residential setting, as well as in offices, shops and hotels.

IEEE802.11abgn Access Point

Two equipment to meet the needs for all indoor wireless connections:
- CHR1023 - includes two 802.11a/b/g/n dual band radio modules with external SISO antenna, that can be simultaneously used for wireless connection with data rates up to 150Mbps;
- CHR1013N - includes one 802.11a/b/g/n dual band radio module with external MIMO antenna, that can be used for wireless connection with data rates up to 300Mbps.

Model	Radio nr.	Antenna	Data In.	Standard	Band	Data Rate
CHR1023	2	External SISO	LAN	802.11a/b/g/n	2,4 GHz / 5 GHz	150Mbps
CHR1013N	1	External MIMO	LAN	802.11b/g/n	2,4 GHz / 5 GHz	300Mbps

Flexibility

Each Chronolink CHR1000 products can be customized for the most diverse application scenarios by connecting different external antenna types (directive, sectorial, omnidirectional etc.).
Output power limitation allows the use of high-gain antennas while conforming to regulations on radiated energy levels.
Each radio module can be separately configured for Access Point, Bridge or Station operation; the modules are internally connected through IP routing. Chronolink products support a proprietary protocol for the creation and management of mesh networks.
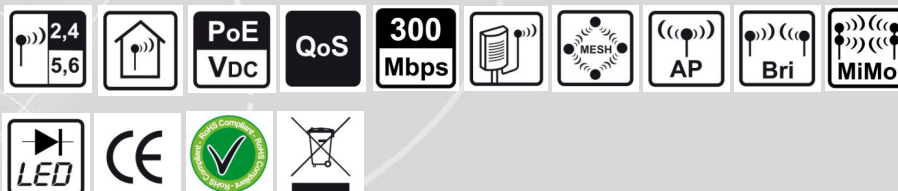
Access Point with Bandwidth management

CHR1000 systems appliances allow comprehensive bandwidth management. Both the upstream bandwidth and the resources available to each client can be monitored, prioritized and limited as required in order to attain the desired Quality of Service QoS levels.

Features

Small size, structural strength, modularity, actractive aestetich shapes, ease of installation, make Chronolink CHR1000 line equipment the ideal for all indoor wireless network application.
- Three Ethernet ports.
- Direct or PoE power supply.

LINKIT)))
SISTEMI WIRELESS

Serie CRONOLINK CHR1000

The Chronolink CHR1000 series, represents an optimization of the performance, quality and cost ratio, applicable to new generation wireless transmission systems for indoor applications. The newest solution integrated in the Chronolink equipment, make it easier all the life cycle phases of a wireless network: design, installation, start-up, maintenance.

The simple and essential equipment design with little dimension, permits to install the equipment everywhere and in fast and safe way. Chronolink CHR1000 systems integrate 1 or 2 IEEE802.11a/b/g/n radio modules for connection of signal with data rate up to 300Mbps.

CHR1000 systems make available 3 ethernet front ethernet ports as well as the possibility to be power supply directly or via PoE.

An efficient testing function, allows to solve the antenna alignment problem. Furthermore, from each site, is possible to check the signal level received on remote equipment. Installation and maintenance became smart and easy.

Frequency scan function, with relevant spectrum analysis , permits free channels identification during start-up phase.

Chronolink equipment are manageable through web interface or dedicate GUI, also via internet.

The equipment can store all the traffic logs regarding access and traffic connection. An FTP server and about 100MByte memory are housed on board to store files and data.

Connection and data security are guaranteed by a WEP key of 104 bit with WPA and WPA2 access control.

Time link worsening as well as latency problem, have been eliminated thanks to a dedicate firmware and hardware project.

Chronolink is the solution for the development of network dedicated to video, data and VoIP transmission.

Intelligent management of the signal's priority and of bandwidth allocation, allows to satisfy all the request in terms of Quality of Service QoS.

Technical Characteristics	CHR1023		CHR1013N	
Nr. Radio Module	2		1	
IEEE Standard	802.11a/b/g/n Hiperlan 2			
Frequency	2,400 - 2,483 GHz 5,470 - 5,725 GHz			
Modulation	DSS (DBPSK, DQPSK, CCK) OFDM (BPSK, QPSK, 16-QAM, 64-QAM)			
Channel Bandwidth	5MHz-10MHz-20 MHz-2 x 20MHz			
Channel Management	Manual - Automatic - DFS - Radar Free			
Antenna type	External (N Female 50 ohm connector)			
Maximum Output Power	+ 18 dBm			
Power Adjustment	from -2 dBm up to + 18 dBm step 1 dB			
Rx Senttitivity	2,4GHz	5GHz	2,4GHz	5,6GHz
	-95 dBm @ 1 Mbps	-90 dBm @ 6 Mbps	-93dBm @ MCS0 20MHz	-96dBm @ MCS0 20MHz
	-90 dBm @ 6 Mbps	-81 dBm @ 24Mbps	-91dBm @ MCS0 40MHz	-91dBm @ MCS0 40MHz
	-90 dBm @ 11 Mbps	-76 dBm @ 36 Mbps	-77dBm @MCS7 20MHz	-76dBm @MCS7 20MHz
	-73 dBm @ 54 Mbps	-73 dBm @ 54 Mbps	-74dBm @ MCS7 40MHz	-73dBm @ MCS7 40MHz
Wireless Mode	Access Point, Bridge, Repeater, WDS, Station, Hot Spot			
Data Encryption	WEP 64/128 bit; WPA, WPA2, TKIP, AES-CCM-TKIP, PSK/EAP, Mac Filtering, IP Filtering, Radius Server, Proprietary WDS, Firewall Integrato			
Ethernet Standard	10/100 Base-T — Auto MDI/X — std.802.3		10/100/1000 Base-T Gigabit — Auto MDI/X — standard 802.3	
VLAN Support	802.1q - Multiple VLAN interface – Inter VLAN routing			
VPN Support	IPSEC, PPPoE, EoIP, PPTP, L2TP			
QoS Support	802.1p - IPToS RFC791 - CBQueuing - PCQ, RED, SFQ, FIFO queue - CIR - MIR - peer-to-peer management			
Network Routing	OSPF – RIP - BGP - STP - RSTP - NAT – MPLS – IPv6 - MME			
Mesh	HWMP+ , proprietary layer 2 wireless mesh routing protocol			
Management	Telnet, SSH, FTP, Proprietary GUI, WEB			
Power Supply Type	Local and/or Power Over Ethernet (POE) technology			
Power Supply	18Vdc 450mA		18Vdc 400mA	
Operating Temperature	-105°C / +50°C			
Dimension mm (H x L x D)	380 x 140 x 200			
Weight	1,0 Kg			
Protection	indoor			
Standard	EN301893 EN300328 EN301489-17 EN60950-1 ERC70-03			