

ARRIS Wireless Solutions

1.9GHz and 3.5GHz Base Station Interfaces

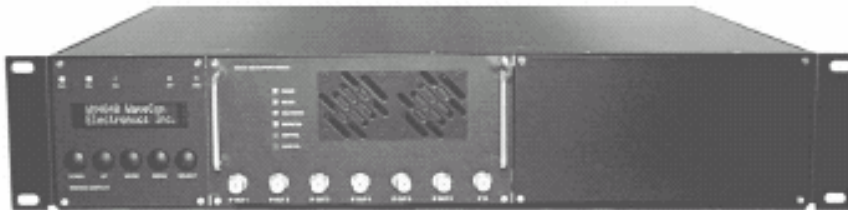


Application

Provides a complete interface solution between the WMTS controller and the indoor or outdoor RF Base Station transceivers.

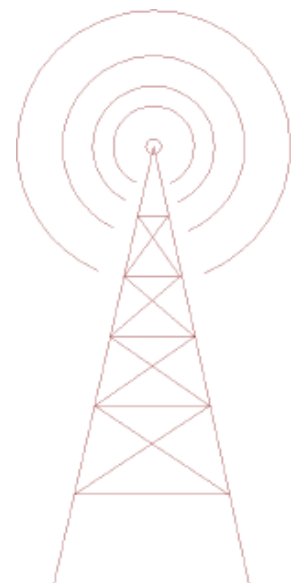
Architectural Overview

The WM4040 Cable Modem Termination System (CMTS) Wireless Interface System acts as a single point of connection between a DOCSIS CMTS and a family of high frequency transceivers in both indoor units and outdoor units. Advanced design allows the integration of a frequency agile upconverter, upstream splitter, outdoor transceiver power supply, and indoor-outdoor control link in a single 2U rack mount chassis. Out-of-band signalling over the single cable indoor-outdoor connection with the ARRIS series of base station transceivers allows for full SNMP management of the operational parameters. The WM4040 chassis has room for wireless interface modules that can be used independently or as a redundant pair.



Product Feature

- **Single Point of Connection Between CMTS and RF**
- **Local Control through Front Panel Interface**
- **Remote Control via RS232/RS485**
- **Optional SNMP Ethernet Connection**



ARRIS Wireless Solutions

1.9GHz and 3.5GHz Base Station Interfaces



Specifications Base Station

Transmit:	Bandwidth Passband 6MHz IF Input Frequency 44 MHz Bandwidth Passband 6 MHz IF Input Level +25 to +35 dBmV nominal IF Connector F female, 75 ohm IF Return Loss 16 dB typical
Receive:	Input Frequency Range 17-42 MHz Output Connections Up to 6 Output Connectors F female, 75 ohm Return Loss 15 dB
General:	Remote Control Interface.. Ethernet RS232/485, Terminal, or SNMP over IEEE802.3 10BaseT Power Requirement 100 to 240 VAC, 50 to 60HZ (Optional - 48VDC) Power Consumption (does not include BST) ..20W (single u/c module), 40W (two u/c modules) Operating Temperature Range 10 to 40°C Frequency Reference Internal OCXO Reference Stability ±0.3 ppm over temperature, ±1.0 ppm over 10 years Mounting Standard 19" (48.3 cm), 2U (3.5") rack space Dimensions .19" (w) x 14.9" (d) x 3.5" (h) (48.3 x 37.9 x 8.9 cm) Weight 11.5 lbs. (5.2 kg)
Transceiver Signaling:	Downstream Carrierbetween 366MHz to 594MHz) Upstream Carriersbetween 18MHz to 42MHz DC Power -48VDC Signaling 1MHz signaling channel Connectors N Female

Ordering Information

CMTS to RF Interfaces Interfaces:

WM4040 Single Wireless Interface System (100-240 VAC)	620243
WM4040-6S2 Single Wireless Interface System (-48 VDC)	620244
WM4040 Dual Wireless Interface System (100-240 VAC)	620241
WM4040-6S2 Dual Wireless Interface System (-48 VDC)	620242
SNMP Option	Add Suffix 2S1

The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice. ARRIS, the ARRIS logo, Cadant®, Q5™, Touchstone™, Cornerstone®, and TeleWire Supply® are all trademarks of ARRIS International, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. The product described here is provided to ARRIS on a resale basis. © Copyright 2004 ARRIS International, Inc. All rights reserved. Reproduction in any manner whatsoever without the express written permission of ARRIS International, Inc., is strictly forbidden. For more information, contact ARRIS.
 16 February 2005