Radio Interface Unit (RIU-4)

A Corning MobileAccess Solutions Product

features and benefits |

Future ready	• All standard BTS/BDA cellular services are supported • Per RIU-4, up to four services in any combination • RIU Combining option of up to 2 RIU-4 units
Automatic signal control via configurable AGC **Advanced management and control**	• Remote setup, adjustments, and monitoring through SC-450 controller connections • Allows monitoring of receive and transmit signals from the operator's BTS/BDA equipment • Programmable Noise Level reduction parameter • Intuitive WEB GUI
Flexible interfaces	• BTS/BDA modules can be installed in any order • Simplex and Duplex interface to BDA/BTS • Supports up to four (4-port) Base Units (BU) or 8 (4-port) BUs using an Expansion kit
Simple setup	RIU-4 is fully compatible with the current RIU-IM unit. Commissioning process is identical in all RIU models

The Quad-Band Radio Interface Unit (RIU-4) provides a scalable, cost-effective solution for adjusting the RF signal source from a number of host base-transceiver stations (BTS) or bi-directional amplifiers (BDA) and feeding the conditioned RF signals to Corning MobileAccess DAS coverage systems.

The RIU-4's scalable design is ideal for large deployments, and can easily expand to support operator's long-term needs. Each RIU-4 unit can support up to four cellular services in a stand-alone mode, whereas additional different services/bands (up to 6) can be supported when two units are connected in a Master/Slave configuration. Each unit supports up to four 4-port Base Units (or two 8-port Base Units), whereas additional Base Units (up to four 4-port or two 8-port Base Units) can be supported when utilizing the Expansion Kit.

Remote control and monitoring is provided through a System Controller (SC-450) connection, and enables adjusting the RF input power level from the BTS or BDA to the system and configuring the Automatic Gain Control (AGC) function to ensure a constant level of RF input to the system. Controlling Uplink RF signal is facilitated as well to provide UL Noise level reduction when necessary.

Quad-Band Radio Interface Unit (RIU-4)
| Photo CMA171

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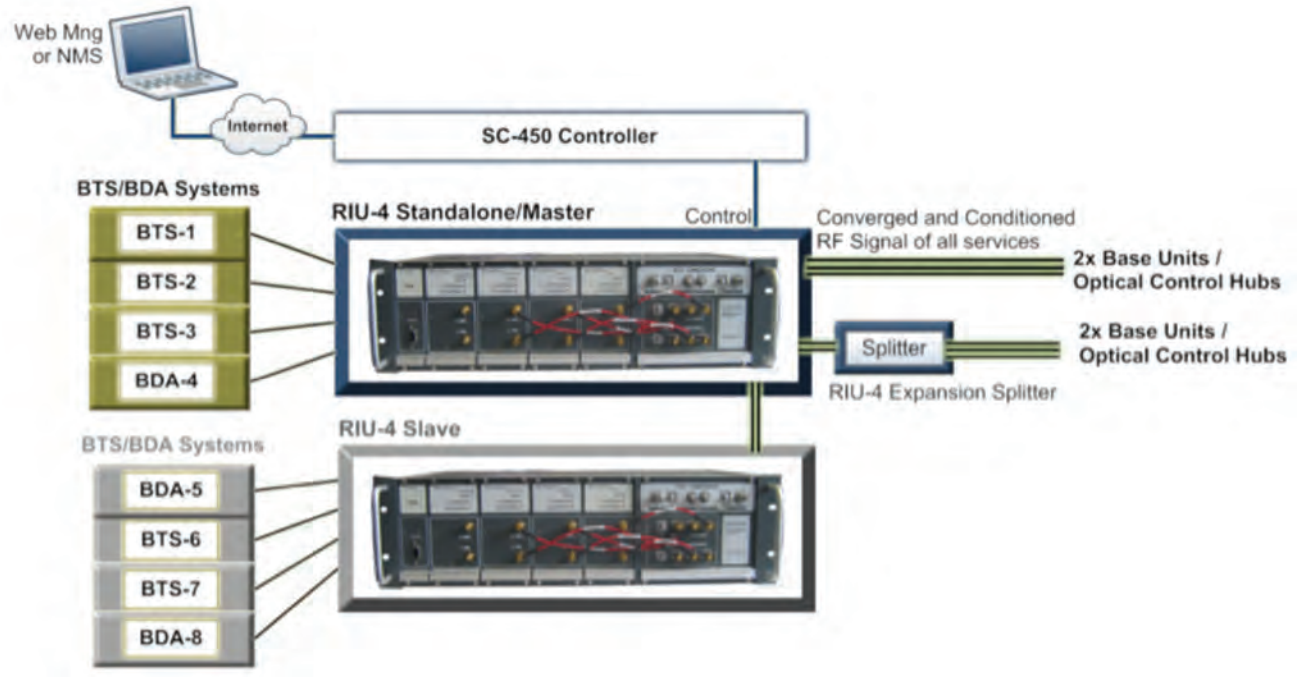

Example of RIU-4 Master and Slave Installation Supporting more than 4 Services Delivered to the same Base Units

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specifications |

RF In	From BTS (to BTSC): From BDA (to BDAC):	10 to 36 dBm (0 to 40 dBm for 700LTE model) -16 to 10 dBm	
Power	DC Input: Power Consumption:	20 to 48 VDC Per BTSC/BDAC unit: 6 W; Total: < 30 W	
LEDs	BTSC/BDAC Module: System Level	Run DL Overload DL Low Signal Power	Operation status High DL output Low DL output Power input indication
Physical Characteristics	Dimensions cm (in): Weight (4 modules):	48.4 x 3U x 30 (19 x 3U x 11.8) 10 Kg (22.5 lbs.)	
RF Connector Types	Front Panel: Interfaces to (up to) 4 Conditioners Interface to second RIU-4 unit (Master/Slave support) Rear Panel: Interface to BTS/BDA: Interface to Base Units:	 (8) QMA connectors (6) QMA connectors (3) N-Type connectors on each conditioner (8) QMA connectors for Base Units (BUs) (2) QMA connectors for BUs expansion kit	
Environmental Specifications	Temperature: Operating Storage Humidity:	 0º to +50ºC (32 to 122º F) -20º to +85º C (-4 to 185º F) 10% to 95%, non-condensing	
Standards and Approvals	USA: NRTL: Europe: EU Safety:	FCC 47 CFR part 15B UL 60950-1 EN 301489 EN 60950-1	

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ordering information |

Part Number	
RIU-4 Accessory Kits	
AK-RIU4-COMBINE	RIU-4 Combining Cables Kit, including (2) QMA/QMA cables, 80 cm length
AK-RIU4-BU-CABLES	RIU-4 Cables Kit, including (4) QMA/N-Type 80 cm cables for BUs connections
AK-RIU4-EXP-BU	RIU-4 Expansion Accessory Kit for up to (4) Base Units
RIU-4 Chassis and Modules	
RIU-4	Radio Interface Unit, Support for 1-4 Conditioners
RIU-BTSC-LTE-700	700 LTE Conditioner, 0 to +40 dBm Input Range
RIU-BTSC-PS700	Public Safety 700 MHz Conditioner, +10 to +36 dBm Input Range
RIU-BDAC-PS700	Public Safety 700 MHz Conditioner, -16 to +36 dBm Input Range
RIU-BTSC-CELL	Cellular Conditioner, +10 to +36 dBm Input Range
RIU-BDAC-CELL	Cellular Conditioner, -16 to +10 dBm Input Range
RIU-BTSC-IDEN	BTS iDEN/SMR800 Conditioner, +10 to +36 dBm Input Range
RIU- BDAC-IDEN	BDA iDEN/SMR800 Conditioner, -16 to +10 dBm Input Range
RIU-BTSC-SMR	SMR900/Paging Conditioner, +10 to +36 dBm Input Range
RIU-BDAC-SMR	SMR900/Paging Conditioner, -16 to +10 dBm Input Range
RIU-BTSC-PCS	BTS PCS Conditioner, +10 to +36 dBm Input Range
RIU-BTSC-G-PCS	BTS PCS Conditioner for PCS w/ G-Block support, +10 to +36 dBm Input Range
RIU- BDAC-PCS	BDA PCS Conditioner, -16 to +10 dBm Input Range
RIU-BDAC-G-PCS	BDA PCS Conditioner w/G-Block support, -16 to +10 dBm Input Range
RIU-BTSC-GSM	BTS GSM 900 MHz Conditioner, +10 to +36 dBm Input Range
RIU-BTSC-GSM-O	BTS GSM 900 MHz Conditioner for Orange, +10 to +36 dBm Input Range
RIU-BTSC-E-GSM	BTS EGSM 900 MHz Conditioner, +10 to +36 dBm Input Range
RIU-BDAC-E-GSM	BDA EGSM 900 MHz Conditioner, -16 to +10 dBm Input Range
RIU-BTSC-DCS	BTS DCS 1800 MHz Conditioner, +10 to +36 dBm Input Range
RIU-BTSC-UMTS	BTS UMTS 2100 MHz Conditioner, +10 to +36 dBm Input Range
RIU-BTSC-AWS	BTS AWS Conditioner, +10 to +36 dBm Input Range
RIU- BDAC-AWS	BDA AWS Conditioner, -16 to +10 dBm Input Range

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