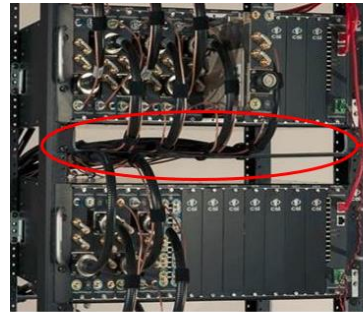


ClearLink® Universal DAS Interface Tray (UDIT™)

Product Features

- BTS Conditioning
- Local and Remote Controllable via Web or Mobile App
- Remote and Local monitoring of Active Alarms and Power Levels
- User Profile Password Protection
- Self-Discovery of Modules and Sub-Racks
- System and User Logs
- 4:1 Splitter/Combiner for Signal Management



UDIT System



Cable Management

Ordering Information

Description	Model Number	Part Number
Chassis frame with Control module	UDIT-CH1-CM1D-XXEN-194U	CS18-115-127
Chassis frame with Control module and 12 blank panels	UDIT-CH1-CM1D-XXEN-194U-12BP	CS18-115-128
Cable Management, 19"	UDIT-1UCM	CS18-115-124
Chassis, 4U, 19" Rack Mount	UDIT-CH1-194U	CS18-115-100
Control Module, -48VDC	UDIT-CM1D-XXEN	CS18-115-101
Splitter/Combiner, 4-Way Active, 700 - 2200 MHz	UDIT-SCS4-AXH-700-2200	CS18-115-109
Power supply module, 48VDC	UDIT-PS-48VMOD	CS18-200-100
Power supply chassis with 1 module, -48VDC	UDIT-PSCH-148VMOD	CS18-200-101
Power supply chassis with 2 modules, -48VDC	UDIT-PSCH-248VMOD	CS18-200-102
Blank covers for POI slots	UDIT-Pblank	CS18-115-114
FAN replacement for UDIT Chassis	UDIT-FAN	CS18-115-115
Hi//Low Jumper	UDIT-POI-HL-LMPR	700-43188-001

POI Module	Downlink	Uplink	Model Number	Part Number
L7 - 700 MHz lower	728-746	698-716	UDIT-P1SDS-H3AX2-700L	CS18-115-125
U7 - 700 MHz upper	746-757	776-787	UDIT-P1SDS-H3AX2-700U	CS18-115-126
S8 - SMR 800 MHz	851-869	806-824	UDIT-P1SDS-H3AX2-800	CS18-115-116
850 - 850 MHz	869-894	824-849	UDIT-P1SDS-H3AX2-850	CS18-115-106
PCS - 1900 MHz	1930-1995	1850-1915	UDIT-P1SDS-H3AX2-1900	CS18-115-107
AWS - 2100 MHz	2110-2155	1710-1755	UDIT-P1SDS-H3AX2-2100	CS18-115-108

Custom cable assemblies are available upon request, including those with right angle adapters. Additional accessories such as -48V power supplies, wireless MODEM, connectors and cables are also available. Call CSI at 1.877.844.4274 for details.

General Description

ClearLink® UDIT™ is a modular, scalable active DAS Interface which provides Radio Frequency (RF) conditioning between the Base Transceiver Station (BTS) and a Distributed Antenna System (DAS). UDIT may be used in a single or multi-operator (Neutral Host) systems. UDIT is DAS and BTS vendor neutral, providing a common BTS interface and simplifying deployment, commissioning and training. Signals from multiple operators using different technologies can be combined and balanced to ensure power is properly allocated and maintained. Designed to maximize Return on Investment (ROI); UDIT occupies up to 60% less valuable space than comparable passive solutions.

UDIT consists of a 13 slot Sub-Rack chassis which holds one control module with integrated Power Supply Unit (PSU) and up to 12 Point Of Interface (POI) modules. UDIT can be mounted to two-post or four-post racks with the included hardware. Each plug-and-play UDIT POI is hot-swappable and automatically detected by the system. All UDIT cabling is accessible from the front. Adding to and/or reconfiguring an installed system can be done without interrupting the rest of the system.

The UDIT Control/PSU Module provides power to all the modules installed in the UDIT Chassis. It also provides a Graphical User Interface (GUI) for configuration, status and alarm information. Alarms generated in the UDIT system can be monitored locally or remotely through Simple Network Management Protocol (SNMP).

The Splitter/Combiner Module divides or sums signals going between the BTS and DAS. As a Combiner it allows the system to resolve spectral density issues by allowing disparate frequency bands to be grouped together and passed to the DAS. As a Splitter it allows one BTS path to be split across up to 4 DAS zones.

The slots in the Cable Manager allow flexibility in securing BTS and DAS cables. Cables can be routed from the front of UDIT Chassis to the rear of the rack or vertically along the front of the UDIT Chassis and across Cable Managers mounted above and below the UDIT.

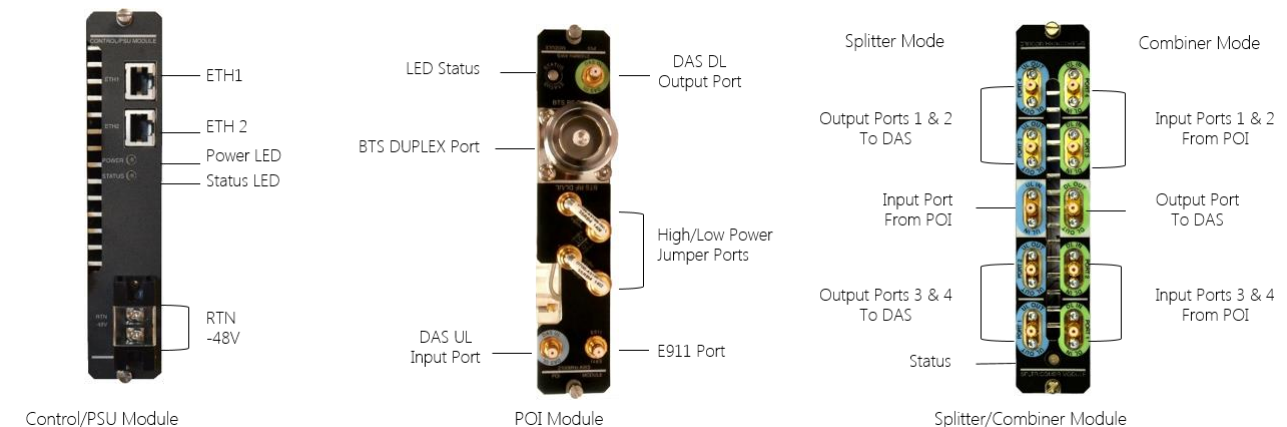
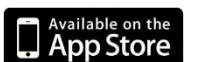
The UDIT Mobile App available for Android™ and Apple® tablets allows technicians to monitor the UDIT in real time, adjust the uplink and downlink RF parameters and review alarm conditions which can improve response time, operating efficiency and technician productivity.



Universal DAS Interface Tray

Product Highlights

- High power BTS conditioning (Up to 100W)
- Industry's lowest fixed loss in DL path
- DAS vendor neutral
- Low Passive Inter Modulation (PIM)
- Programmable Dynamic DL Power Control
- Built in Power meters to monitor input and output power in real time
- Integrated web GUI access for remote and local configuration, management and monitoring of alarms
- Plug-and-play automatic module detection and configuration
- Hot swappable POI modules and fans
- All front cabling
- IP/SNMP Daisy Chaining – uses less IP/SNMP resources and simplifies configuration
- SMNP traps for NOC alarm monitoring



ClearLink® Universal DAS Interface Tray (UDIT™)



Electrical Specifications

EMI	FCC Part 15, Class B
Power Consumption	
Chassis w/Control Module	75 Watts Max (Typical at -48VDC)
Control Module	9.6 Watts Max (Typical at -48VDC)
Splitter/Combiner Module	1.0 Watts Max (Typical at -48VDC)
POI Module	7.0 Watts Max (Typical at -48VDC)

Environmental Specifications

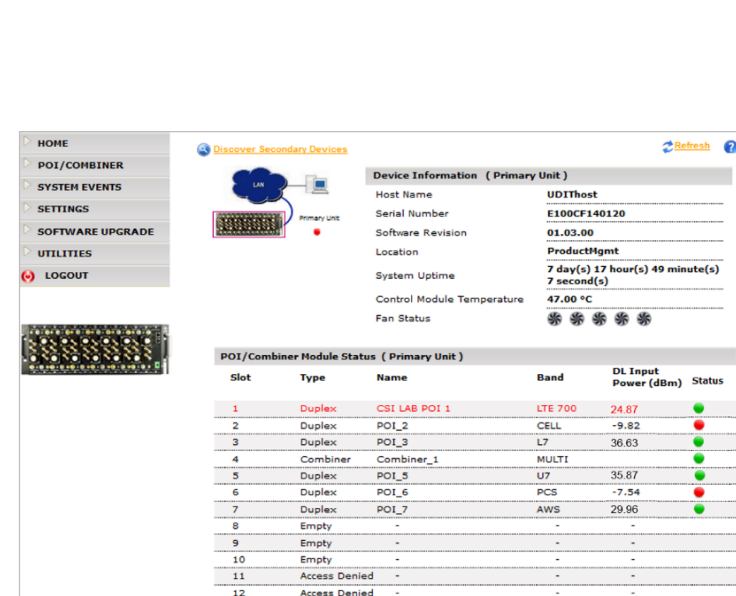
Operating Temperature	-40°F to +140°F (-40°C to +60°C)
Relative Humidity	Up to 95% (non-condensing)

Mechanical Specifications

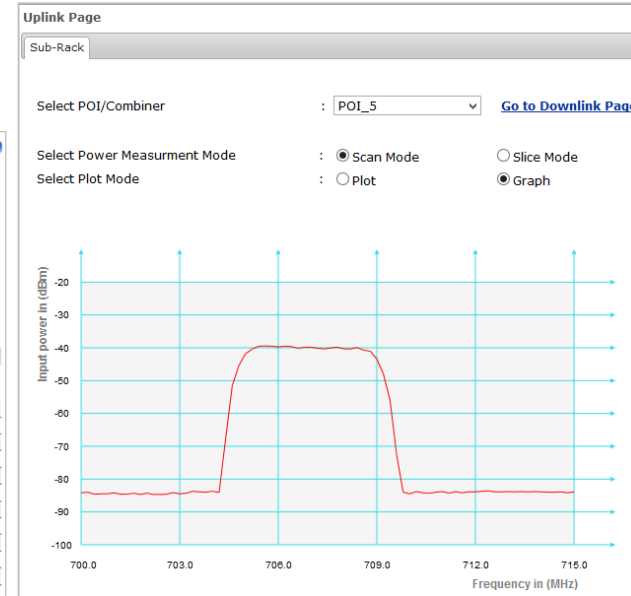
Dimensions		Weight	
Chassis	7 x 19.13 x 10.64 in.	Chassis	14.3 lbs
Control Module	7 x 1.3 x 16.9 in.	Control Module	3.3 lbs
Splitter/Combiner Module	7 x 1.3 x 16.9 in.	Splitter/Combiner Module	1.33 lbs
POIs	7 x 1.3 x 16.9 in.	POI Module	5.5 lbs
Cable Management	1.73 x 19 x 2.4 in.	Cable Management	2.1 lbs

Performance Characteristics

POI Module			
PIM (2 x 43 dBm)		-153 dBc	
Composite Input Power / Maximum (BTS Port)		50 dBm (100 watts) High power mode, 40 dBm Low power mode	
BTS Port Return Loss		≥ 18 dB	
Programmable Dynamic DL Power Control		Available	
DL Attenuation Range (nominal)		31 dB in 1 dB steps	
DL Insertion Loss (typical)	Band	High Power Mode	Low Power Mode
	L7	12.3 dB	2.0 dB
	U7	12.7 dB	2.5 dB
	S8	15.9 dB	2.5 dB
	850	15.9 dB	2.5 dB
	PCS	15.2 dB	4.8 dB
	AWS	15.0 dB	4.1 dB
UL Attenuation Range (nominal)		35 dB (0 to 35 dB in 1 dB steps)	
UL Return Loss		≥ 18 dB typical (16 dB minimum)	
Power Measurement		Available for both Downlink and Uplink	
Splitter/Combiner Module			
Operating Frequency Range		698 – 2155 MHz	
Insertion Loss		7.5 dB typical	
Return Loss		≥ 14 dB	
Isolation		≥ 20 dB	
Composite Maximum (Power Per Port)		+30 dBm (1 Watt)	



Example of UDIT GUI



POI Uplink Spectrum Display

Interface (All connectors are accessible on the front panel)

Control Module	
Power	Phoenix 1829345 or two terminal posts
Eth1	RJ45
Eth2	RJ45
POI Module	
Interfaces	Web Server (HTTPS), SNMP v1, v2 & v3
Function	Connector Style
BTS RX/TX	7/16 DIN(f) (Duplex)
TX (Downlink)	QMA (f) (Simplex)
Rx (Uplink)	QMA (f) (Simplex)
E911 Port	QMA (f) (Simplex)
General Alarm	Integrated System Management, Summary Alarm output, LED
Splitter/Combiner Module	
All ports	QMA (f)

