

PROJECT:

QTY:

TYPE:

CATALOG:

SYSTEM OVERVIEW

The AGILE-CORE™ Distributed Edge Architecture solution is an intelligent power distribution and control system that leverages safe DC power to provide the best IT and OT networks possible while reducing the total installed and operating cost of a project. AGILE-CORE™ is a hub and spoke architecture where AC or DC power is fed into the HEADEND then converted to safe DC power. The power is then converged with data over fiber to safely distribute power and data to Edge IDFs up to 2000' away. Edge IDFs then distribute power and data again locally to end points such as wireless access points, cameras, clocks, lighting, motion/daylight sensors, motorized shades, USB convenience outlets and more.

OVERVIEW

The Building Infrastructure Termination System (BITS™) Edge IDF uses a single unified power and data infrastructure to provide modular options of data, lighting and controls, USB charging solutions, shade control, IoT and more. This flexible solution, extends power and control to the edge, substantially decreasing traditional cabling requirements, and creating a future proof infrastructure by providing a robust fiber and copper backbone with 10 GB or more uplink connectivity. The suspended or wall mounted edge IDF significantly reduces the amount of square footage needed to support IT and OT networks. It requires less maintenance, shorter cable runs and ease of system growth over the 50 year life of a commercial or industrial facility.

ORDERING GUIDE:

Catalog # BT 9US PDM/2 LM/6 LT DW



FEATURES:

- No local AC Power needed
- Ultra quiet fanless operation allowing use in noise sensitive locations
- NEC Class 2 (LPS) or Class 4 (FMPS) low voltage input power
- Secure suspended or wall mount design reduces space needed to deploy IT & OT end points
- 10GB or more uplink connectivity and power availability exceeding 2000W per BITS™
- Kitted for ease of assembly with UL and ETL listed components
- Works with normal and emergency lighting

APPLICATIONS:

- K-12 Schools
- Office Buildings
- Warehouse
- Manufacturing
- Data Centers
- Advanced Ed and more

Family of Edge IDFs	Size	Power Distribution Module / Qty	USB Power Distribution Module / Qty	Layer 2 Network Switch Or Optical Network Terminal / Qty	DC Lighting & Power Controller (DCLP) / Qty	Options
BT BITS™	9US suspended	PDM	1 2	1 2 3 4	1 2 3 4	LT Lighted Interior
	9UW wall mount					
			USB Power Distribution Module for USB Outlets	AT Allied Telesis IE220 10GHX 980	LM LUUM XS 108H	DW Door with window
			If none, skip to layer 2 network switch	TL Tellabs ONT205	If none, skip to options	CUST CLR Custom Color
				CS Cisco IE-3100-8P2C		
				If none, skip to DCLP selection		

For additional network switches, optical network terminals or lighting and power controllers, please contact your sales representative.
BITS™ is intended for use with Sinclair Digital's AGILE-CORE™ Distributed Edge Architecture Solution.

SPECIFICATIONS - ELECTRICAL

PDM (Power Distribution Module) PDM-FMP-MW2000-F3

Input Power Voltage:	310 to 350VDC (336 nominal) fault managed power from AGILE-CORE™ HEADEND only
# of Input Channels:	1-2
Input Power Per Channel:	1,260W(VA) @ 336VDC / Up to 3.75A Max
Output Power Voltage:	57VDC
# of Output Ports:	4
Total Output Power: Ports 1 through 3 and Accessory Port	2,016W(VA) @ 57VDC / Up to 35.4A Max Combined Total Load Rating
Output Port 1:	1,008W(VA) @ 57VDC; Up to 17.6A Max
Output Ports 2&3 Combined Output:	1,008W(VA) @ 57VDC; Up to 17.6A Max
Output Port 4 (Accessories):	- Circuits 1 & 2: 114W(VA) @ 57VDC; Up to 2A; unswitched, shared with Output Port 1 - Circuit 3: 57W(VA) @ 57VDC; Up to 1A; switched, shared with Output Port 1 - Circuit 4: 57W(VA) @ 57VDC; Up to 1A; switched, shared with Output Port 2 - Circuit 5: 57W(VA) @ 57VDC; Up to 1A; switched, shared with Output Port 3
Output Protection Feature(s):	Constant current limiting with delay shutdown after 3 seconds, re-power on to recover

USB PDM (Power Distribution Module for Low Voltage DC USB Outlets) PDM-FMP-MW1000-USB

Input Power Voltage:	310 to 350VDC (336 nominal) fault managed power from AGILE-CORE™ HEADEND only
# of Input Channels:	1
Input Current Per Channel:	1,260W(VA) @ 336VDC / Up to 3.75A Max
Output Power Voltage:	36VDC
Total Output Power:	1,008W(VA) @ 36VDC / Up to 27.8A Max Combined Total Load Rating
# of Output Ports:	10
Output Power Per Port:	100W(VA) @ 36VDC / Up to 2.78A Max
Output Protection Feature(s):	Constant current limiting with delay shutdown after 3 seconds, re-power on to recover

LUUM XS-108H DIRECT CURRENT LIGHTING & POWER CONTROLLER

Input Power Voltage:	57VDC from BITS™ PDM
Input Power:	100 to 1000W
Output Power Voltage:	54VDC
# of Output Ports:	(8) IEEE 802.3bt PoE++ / 2 Channel X-PoE ports
Total Output Power:	1000W(VA) (2.3A max output per port)
Outputs Per Port:	2.3A max per port (each port is split among two separate channels with a 1.15A max output each)
Output Protection Feature(s):	automatic resetting overload and short circuit protection

ALLIED TELESIS IE220 10GHX 980 LAYER 2 NETWORKING SWITCH

Input Power Voltage:	57VDC from BITS™ PDM
Input Power:	266W(VA) @ 57VDC / Up to 4.67A Max Power Consumption
Output Power Voltage:	48 to 54VDC (240W Max PoE Power Budget)
# of Output Ports:	(8) IEEE 802.3bt PoE++
Total Output Power:	240W(VA)
Output Protection Feature(s):	automatic resetting overload and short circuit protection

TELLABS ONT205 OPTICAL NETWORK TERMINAL

Input Power Voltage:	52-57VDC from BITS™ PDM
Input Power:	150W(VA) @ 54VDC / Up to 2.78A Max Power Consumption
Output Power Voltage:	48 to 54VDC (140W Max PoE Power Budget)
# of Output Ports:	(5) IEEE 802.3af/at ports / Up to 30W per port / Up to 60W per three high power ports
Total Output Power:	140W(VA)
Output Protection Feature(s):	automatic resetting overload and short circuit protection

SPECIFICATIONS

ELECTRICAL

CISCO IE-3100-8P2C LAYER 2 NETWORKING SWITCH

Input Power Voltage:	57VDC from BITS™ PDM
Input Power:	260W(VA) @ 57VDC / Up to 1.3A Max Power Consumption @48V
Output Power Voltage:	48 to 54VDC (240W Max PoE Power Budget)
# of Output Ports:	(8) IEEE 302af/at ports / Up to 30W per port
Total Output Power:	240W(VA)
Output Protection Feature(s):	automatic resetting overload and short circuit protection

ENVIRONMENTAL:

Operating Temperature:	35 ~ +50C
Storage Temperature:	-40 ~ +85C
Relative Humidity (non-condensing):	20 ~ 90% RH non-condensing
Environmental Space:	Indoor use only

Warranty: see general terms and conditions at sinclair-digital.com

MECHANICAL

Standard Color:	Putty black Lockable with removable side panels
Dimensions:	23.64" L x 23.5" W x 20" Tall
Mounting:	• Wall or Suspended via Threaded Rod • 9 RU of standard 19" passive rack mountable space • Has a capacity of 132 lbs
Material Type:	• Cold rolled steel (1.2mm) with powder coated finish • Four point built-in support brackets for threaded rod or hangers

ACCESSORIES

Field installable, order as a separate catalog number

LVDC USBC1 60 W	Low voltage DC powered decorator outlet - (1) USB A & (1) USB C
AT-TQ6702 GEN 2	Allied Telesis WiFi6 Access Point
LIGHTING	AGILE-CORE™ luminaires
LIGHTING CONTROLS	AGILE-CORE™ lighting controls
POE-DCO-100	PoE++ 100W Decorator Outlet - (1) USB C
POE-DCP-65	PoE++ 65W Decorator Outlet - (2) USB C
VTEVO-6-LED	CAT6 Keystone jack 180° w/ LED indicator
VTEVO-6A-LED	CAT6A Keystone jack 180° w/ LED indicator
VTHT-0044-LED	Crimp tool
VT-0010-LEDPDT	Power Test Tool

STRANDWISE™ CABLE TABLE

of Channels of Fault Managed Power Per BITS™

BITS™ Catalog #	# of Input Channels	Recommended Hybrid Cable*
BT 9US PDM1 AT/2	1-2	HYB ISP FMP16 3P OS2 6F or 12F
BT 9US PDM/1 USB/1 AT/2 LM/4	2-3	HYB ISP FMP16 4P OS2 6F or 12F
BT 9US PDM/3 LM/6	3-6	HYB ISP FMP16 8P OS2 6F or 12F

*Recommendation includes going up to the next available pairs of copper to account for a spare; if using for emergency lighting, recommend adding a pair for EM contact input.

AGILE-CORE POWER DISTRIBUTION AND CONTROL SYSTEM

