# BITS™

### AGILE-CORE<sup>™</sup>

Distributed Edge Architecture

PROJECT:	QTY:
TYPE:	CATALOG:

#### SYSTEM OVERVIEW

The AGILE-CORE<sup>™</sup> 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<sup>™</sup> is a hub and spoke architecture where AC or DC power is fed into the HEADEND then converted to safe DC power. The 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 9U 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
- Convenient secure ceiling grid mount design reduces space needed to deploy IT & OT end points
- 10GB or more uplink connectivity and power availability exceeding 2000W per BITS™ micro
- Kitted for ease of assembly with UL and ETL listed components
- Works with normal and emergency lighting

#### APPLICATIONS:

- K-12 Schools
- Office BuildingsWarehouse
- 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™	9U suspended or wall mount	PDM	1 2	USB Power Distribution Module for USB Outlets If none, skip to layer 2 network switch	1 2 3	AT Allied Telesis IE220 10GHX 980 TL Tellabs ONT205 Cisco IE-3100-8P2C If none, skip to DCLP selection	1 2 3 4	LM LUUM XS 108H If none, skip to options	1 2 3 4 5 6 7 8	LT Lighted Interior DW Door with window CUST CLR Custom Color

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**

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
Output Power Voltage:	57VDC
# of Output Ports:	4
Total Output Power:	2,016W(VA) @ 57VDC / Up to 35.4A Max Combined Total Load Rating
Output Ports 1 thru 3 Output Power:	1,140W/(VA) @ 57VD /Up to 20A Max Each
Accessory Output (Port 4) Power:	114W(VA) @ 57VDC; Up to 2A
Output Protection Feature(s):	Constant current limiting with delay shutdown after 3 seconds, re-power on to recover

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

#### **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			
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			
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™micro 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™micro 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 BITSmicro 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™micro 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

#### MECHANICAL

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

#### **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

### ACCESSORIES

Field installable, order as a separate catalog number				
VL520BK-F	Valcom IP clock w/ text and 2-way comms black finish			
VEIP6K-1	Valcom clock license (1 per site)			
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			



### PERFORMANCE TABLE

#### # of Channels of Fault Managed Power Per BITS™

BITS™ Catalog #	PDM(s) Max Input Power @ 336VDC	USB PDM Max Input Power @ 336VDC	Total Max Input Power @ 336VDC	# of Input Channels	Recommended Hyrbid Cable
BT 9U PDM/1 USB/1 AT/2 LM/4	1260W(VA)	1260W(VA)	2520W(VA)	2-3	HYB ISP FMP16 4P OS2 6F
BT 9U PDM/3 LM/8	3780W(VA)	-	3780W(VA)	3-6	HYB ISP FMP16 8P OS2 6F

## AGILE-CORE POWER DISTRIBUTION AND CONTROL SYSTEM



