

Advantech AE Technical Share Document

Date	2018/04/30	SR#	External
Category	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP	Related OS	N/A
Abstract	SFP with DDM Support List on Advantech Managed Switch		
Keyword	Managed Switch, SFP, DDM		
Related Product	EKI-7706E, EKI-7706G, EKI-7708E, EKI-7708G, KI-7710E, EKI-7710G, EKI-7712E, EKI-7712G, EKI-7716G, EKI-7720E, EKI-7720G, EKI-7428G, EKI-9612G		

■ **Problem Description:**

1. Why can't see any measured value of SFP on DDM diagnostic ?
2. Does Advantech's SFP support DDM ?

■ **Answer:**

1. DDM (Digital Diagnostic Monitor) is a kind of technology which can provide users real-time SFP detected value. Based on SFF-8472 (Industrial Standard Multilateral Protocol), **DDM-supported SFP** should be able to monitor Temperature, Bias Current, RX Power, Voltage and TX Power which are related with SFP's health.
Advantech EKI-7700 series managed switch provide DDM diagnostics (**Fig.1**), users just select **DDM-supported SFP** the measured value would show up automatically once plugged in fiber port.
2. All Advantech's SFP do not support DDM but all **B&B fiber SFP support DDM**. Please refer below links to download B&B SFP datasheet.

B&B SFP Datasheet:

http://advdownload.advantech.com/productfile/PIS/BB-808-39010/Product%20-%20Datash eet/IE%20SFP-SFP+XFP%20Modules_1518ds20180412052459.pdf

Diagnostic Alarm Settings
Diagnostic Alarm: Disabled

Diagnostic Alarm Information
Information Name: Diagnostic Alarm, Information Value: Syslog

DMI Info
GE1

	High Alarm	High Warning	Status	Low Alarm	Low Warning
Temperature	95.000 °C <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	40 °C <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	44.527°C	-50.000 °C <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	-45.000 °C <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
Voltage	3.500 V <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	3.2 V <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	3.284V	3.100 V <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	3.150 V <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
TX Basis	100.000 mA <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	90.000 mA <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	15.502mA	6.000 mA <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	7.000 mA <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
TX Power	-1.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	-5.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	-10.809dbm	-35.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	-30.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled
RX Power	-1.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	-5.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	-40.000dbm	-35.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	-30.000 dbm <input type="radio"/> Enabled <input checked="" type="radio"/> Disabled

Vendor Info

Port	Connector	Speed	VendorName	VendorOui	VendorPn	VendorRev	VendorSn	DateCode
GE1	LC	100M	Axcen Photonics	023-AXFD-1314-0553	AXFD-1314-0553	V2.0AXR2091901489	AXR2091901489	090504
GE2	LC	1000M	Axcen Photonics	023-AXGD-3354-0593	AXGD-3354-0593	V2.0AXR2091901464	AXR2091901464	090505

Fig.1. EKI-7700 Series DDM Diagnostics.