

## 2.2.3 EA-1 Compact Ethernet Adapter

### Connects your Ophir sensor to an Ethernet bus

- From sensor direct to Ethernet with no PC connection
- Powers directly from the Ethernet bus or 12V power supply
- Supports thermal and photodiode smart sensors
- Software support via StarLab application or 'Ophir Ethernet App' PC application software package, both included
- Allows remote monitoring via Telnet, HTTP or UDP protocols



DB15 connector



Mini-USB connector;  
Ethernet RJ45 connector;  
12V power connector

### Smart Sensor to EA-1 to Ethernet to PC

The EA-1 is suitable for OEM customers who desire Ethernet connectivity and want to remotely monitor and control the sensor via their own custom software or the Ophir provided PC application. The EA-1 is designed to connect an Ophir smart sensor to your Ethernet. Standard thermopile, pyroelectric and photodiode sensors are supported. The unit is powered directly from the Ethernet bus if Power Over Ethernet (PoE) is available, or from a standard Ophir 12V power supply if not. The sensor can be monitored remotely over the Ethernet bus, allowing remote connections from distances far in excess of those allowed via RS232 or USB. The device is suitable for industrial or other environments where the bus of choice is Ethernet. Telnet, HTTP and UDP protocols are supported.

Installation and choosing an IP address are simplified via the simple Ophir Ethernet App PC application supplied with the unit. The PC application allows setup and basic functionality such as monitoring power and energy and changing measurement scales or wavelengths. Configuration of the IP address is via the Ethernet or a separate USB connection. The PC operating screen is shown below measuring power and energy.



PC application power screen

PC application energy screen

Additional features such as logging power or energy graphically are provided by the StarLab PC application which also supports the EA-1 device.

#### Specifications

Model	EA-1 Ethernet Adapter
Use	Monitoring Ophir Sensors via Ethernet
Measurement Parameters	As defined by sensor
Supported Sensors	Thermal (a), Photodiode and Pyroelectric
Number of Sensors Supported	One sensor per unit
Data Logging	Thermophile and Photodiode sensors: logging of power at 15Hz into log file Pyroelectric and PD-C sensors: via Ophir Ethernet App – logging of energy at up to ~400Hz into log file via StarLab or direct Ethernet connection – logging of energy at up to ~40kHz
Instruction Set	Supports entire Ophir instruction set for controlling and monitoring sensor
Power Supply	Power over Ethernet or separate 12V power supply
Dimensions	73mm W x 93mm L x 29mm H
Weight kg	0.1
Notes: (a)	BeamTrack functions are only supported via user commands but not with the PC application

#### Ordering Information

Item	Description	Ophir P/N
EA-1	Compact module to operate Ophir sensors over the Ethernet. Comes with basic PC software	7Z08296
EA-1 USB Cable	USB-A to MINI-B Cable (1 unit supplied with EA-1)	7E01217
EA-1 Ethernet Cable	Ethernet Cross Cable (1 unit supplied with EA-1)	7E01192
N polarity Power Supply/Charger	Power Supply/Charger AC/DC 12V 2A N-2.1x5.5 (1 unit supplied with EA-1)	7E05029