

# SPOT

MOUNTINGS AND ACCESSORIES

## PART NAME

## PART NUMBER

### SOFTWARE

SPOTViewer User Pack	808279
SPOT SDK User Pack	808299

### MOUNTINGS

Mounting Bracket and Lock Nut	808468
Water Cooled Mounting	808100
Pan and Tilt Bracket	806761
Sealed to Process Water Cooled Mounting	808862
Sealed to Process Upgrade Kit	808336
Light Purge	808015
System 4 Adapter Kit	808018
Mounting Plate	095.091
Adjustable Mounting Plate	095.168

### CABLES

#### Digital

5m M12-RJ45 Cable with straight connector	807944
20m M12-RJ45 Cable with straight connector	807945
100m M12-RJ45 Cable with straight connector	807946

#### Analog

M16-Free 8 Way Cable 5 m Str Connector	807950
M16-Free 8 Way Cable 20 m Str Connector	807951
M16-Free 8 Way Cable 100 m Str Connector	807952
Analog connection PCB/kit	807942s

### FIBER OPTIC MOUNTINGS

Quick Release Purge Assembly	029.870
Quick Release Purge and Adjustable Mounting Flange	029.871
Quick Release Purge and Mounting Plate	029.872
Quick Release Purge and Angle Mounting Bracket	029.873
Small Ball Mount	150.560
Fiber Optic Adaptor	809901

SEE OUR OTHER LITERATURE FOR THE SPOT R100 AND SPOT MOUNTINGS AND ACCESSORIES:



SPOT R100,  
R160, M100,  
& M160  
DOWNLOAD:  
spotthermometer.com



SPOTVIEWER  
SOFTWARE  
DOWNLOAD:  
spotthermometer.com

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# SPOT

MOUNTINGS AND ACCESSORIES



A PRODUCT OF THE SYSTEM 5 FAMILY  
WWW.SPOTTHERMOMETER.COM

FOR STANDARD BODY AND FIBER-OPTIC VARIANTS



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# SPOT

## MOUNTINGS & ACCESSORIES

**AMETEK LAND HAS BEEN BUILDING PRECISION MEASURING EQUIPMENT SINCE 1947.**

**WE ARE SPECIALISTS IN NON-CONTACT TEMPERATURE MEASUREMENT AND COMBUSTION MONITORING WITH OUR PRODUCTS FINDING APPLICATIONS ACROSS DIVERSE INDUSTRIES SUCH AS STEEL AND GLASS MAKING, POWER GENERATION AND CEMENT MANUFACTURE.**

As part of AMETEK Process & Analytical Instruments Division since 2006, our customers benefit from the worldwide AMETEK sales and service team.

The following information is intended as a guide to the range of optional mountings and accessories available to ensure you get the best possible service from the investment you have made when specifying SPOT pyrometers for your application solution.

For specific recommendations on the choice of mountings, brackets, cables, or any other accessories, that may suit your specific industry or installation, please contact an AMETEK Land sales manager or representative for further advice before ordering.



### SOFTWARE ▼

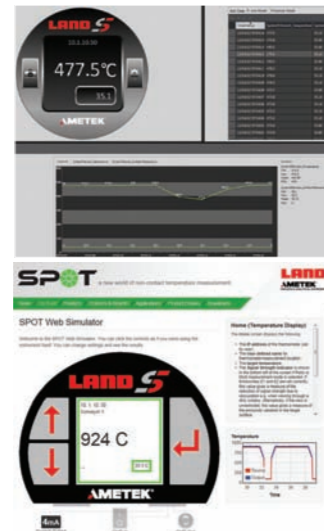
#### SPOTVIEWER

Specifically developed to work seamlessly with the latest generation of industry leading single point thermometers. SPOTViewer's simple installation means that the operator can quickly connect, configure and view data from any of AMETEK Land's SPOT range of pyrometers.

Easy view and analysis of long term data displayed in both graphical and tabular views. Clearly highlights trends and patterns allowing the user a greater understanding of the temperatures involved in their process.

Simple configuration of thermometer settings from a remote location giving the operator total control over temperature measurement on their process without the need to be at the instrument location.

For full details see our SPOTViewer Brochure.



#### THE INSTRUMENT VIEW

A graphical representation of the SPOT pyrometer control panel. Temperature values are displayed and the menu system can be accessed here. This view also allows you to take a snapshot image of the target being viewed by the pyrometer on the lensed variants.

#### THE GRID VIEW

A data-logger view of temperature readings in date/time order

#### THE TREND VIEW

Gives a graphical trace of temperature readings, also in date/time order

#### THE MENU BAR

Provides access to additional options such as data-logger and User Management

#### THE STATUS BAR

Shows an overview of the system connections and displays error messages in the event of a fault.

**PART NUMBERS:**  
**SPOTVIEWER USER PACK**  
**808279**  
**SPOT SDK USER PACK**  
**808299**

### TYPICAL APPLICATION - BLAST FURNACE ▲





## AMETEK LAND OFFERS A RANGE OF SPOT FIXED SINGLE POINT PYROMETERS.

Designed to operate flawlessly in most demanding industrial environments, the SPOT range is perfect for applications across many industries including iron and steel, glass, metal forging, heat treatment, cement, and many more.

The various models in the SPOT pyrometer range are available in temperatures between 250-1800 °C / 482-3272 °F.

SPOT Fixed pyrometers are part of the System 5 family of products, continuing AMETEK Land's fine history in industrial non-contact temperature measurement. Featuring both single wavelength and multi-mode instruments all available in lensed and fiber-optic versions.

The SPOT range are high technology radiation pyrometers designed to produce the most accurate temperature measurements for numerous industrial manufacturing applications. SPOT includes many innovative technologies to simplify setup and use, reduce installation and operational costs together with ensuring high accuracy and long life. Adaptors exist to enable SPOT sensors to be easily retrofitted into Land System 4 and UNO mountings.



## MOUNTINGS

### MOUNTING BRACKET & LOCK NUT

The Mounting Bracket forms the basis of the Light Purge, but can be used on its own where there is no requirement for a purge air supply to keep the pyrometer lens clean. It is straightforward to install, and has a hole for mounting on a tripod. It can also be fitted to ball mount allowing 360° rotation for precision alignment.

PART NUMBER: 808468

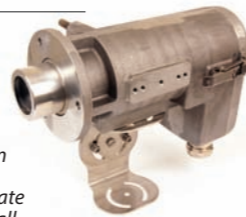


### SEALED TO PROCESS WATER COOLED MOUNTING

The Mounting includes a Protection Window which separates the process from the pyrometer, enabling safe removal of the pyrometer from its jacket at any time.

*Note: The Sapphire Protection Window has an affect on the signal strength, due to transmission losses. By specifying the process window in the instrument software, it will automatically calculate the transmission loss. (Shown with optional small pan and tilt bracket)*

PART NUMBER: 808862



### LIGHT PURGE

The Light Purge is designed to keep the pyrometer lens clean, when installed in less-hostile environments such as light industry or research. (Shown with optional mounting bracket and lock nut)

PART NUMBER: 808015



### SMALL PAN & TILT BRACKET

This dual axis mounting bracket can be used with the water cooled mounting where the mounting front flange is inappropriate.

PART NUMBER: 806761



### WATER COOLED MOUNTING

There are two variants currently available, which can be configured to exact customer requirements. This incorporates the integrated Protection Jacket and Purge plus the hinged back cap. (Shown with optional small pan and tilt bracket)

PART NUMBER: 808100



### SEALED TO PROCESS UPGRADE KIT

This kit includes all parts necessary to upgrade the Water cooled mounting into the sealed to process version.

PART NUMBER: 808336  
Installation manual not the kit

### SYSTEM 4 ADAPTER KIT

The System 4 to SPOT Adapter Kit allows you to install a Land SPOT Pyrometer in an S4-J. This means that you can replace an existing System 4 Pyrometer with a Land SPOT pyrometer without having to replace any existing pyrometer protection jackets or mountings. The System 4 to SPOT Adapter Kit is comprised of an Adapter Sleeve, a Lock Ring and a Replacement Cable Assembly.

PART NUMBER: 808018



### MOUNTING PLATE

The Mounting Plate has four fixing holes, three studs for the jacket or purge and a center thermometer hole.

PART NUMBER: 095.091



### ADJUSTABLE MOUNTING PLATE

The jacket or purge fastens to a circular plate, which with the adjustment of four screws.

PART NUMBER: 095.168



## CABLES

### DIGITAL CABLES

Digital Power Cable - A specific length cable with an M12PoE connector, the other end a RJ45 fitting for a network control switch or Control PC.

PART NUMBERS:  
5m M12-RJ45 cable with straight connector 807944  
20m M12-RJ45 cable with straight connector 807945  
100m M12-RJ45 cable with straight connector 807946



### ANALOG CABLES

Eight conductor analog connector cable one end terminated to an 8-way SPOT connector, the other end stripped flying leads.

PART NUMBERS:  
M16-Free 8 Way Cable 5m Str Connector - 807950  
M16-Free 8 Way Cable 20m Str Connector - 807951  
M16-Free 8 Way Cable 100m Str Connector - 807952



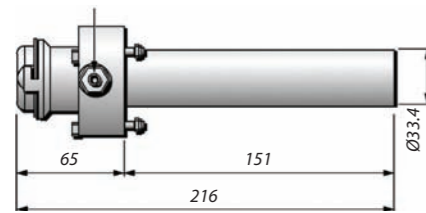


## FIBER-OPTIC MOUNTINGS

### QUICK RELEASE PURGE ASSEMBLY

Features a quick release mount and short Inconel sighting tube. The air purge is used where a clear sight path has to be maintained, by using the purging air to maintain the lens free from dust, dirt, etc. The purge connects to the optic head with a quick release adapter (supplied) which allows rapid, no tools removal of the optic head for routine maintenance. The purge is secured on the installation using either a mounting adapter or plate.

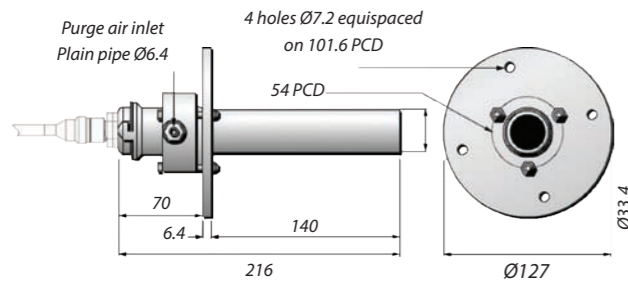
**PART NUMBER: 029.870**



### QUICK RELEASE PURGE & ADJUSTABLE MOUNTING FLANGE

The adapter, air purge and mounting plate assembly attaches to the optic head, and provides a mounting using the four holes through the circular plate. The quick-release adapter which forms an integral part of this assembly allows rapid, no tools removal of the optic head for routine maintenance.

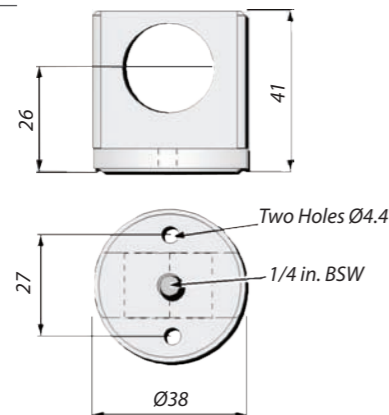
**PART NUMBER: 029.871**



### FIBER OPTIC ADAPTER

Enables the optic-head to be mounted as a stand-alone, in applications which require no purging, protection or special mounting considerations. A single 1/4 in. thread bolt hole can attach to the Small Ball Mounting or a standard tripod mounting. Two further holes in the base permit mounting to a flat surface.

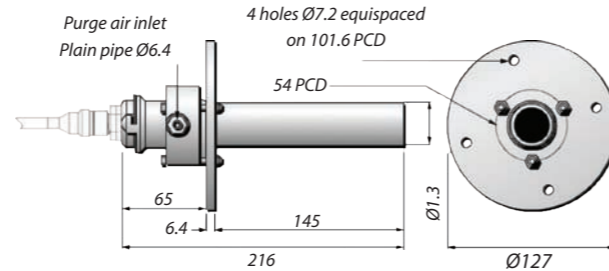
**PART NUMBER: 809901**



### QUICK RELEASE PURGE & MOUNTING PLATE

The adapter, air purge and adjustable mounting flange assembly attaches to the optic head, and provides a mounting using the four holes through the circular plate. Three studs link the main plate to a smaller plate providing adjustment to ensure accurate alignment to the target surface. The quick-release adapter which forms an integral part of this assembly allows rapid, no tools removal of the optic head for routine maintenance.

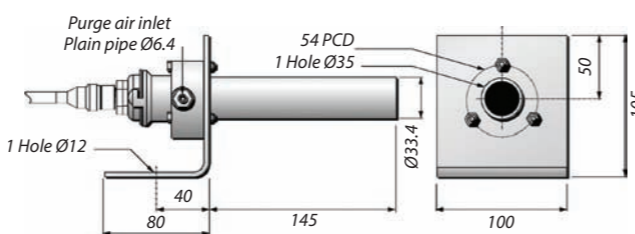
**PART NUMBER: 029.872**



### QUICK RELEASE PURGE & ANGLE MOUNTING BRACKET

The adapter, air purge and mounting bracket assembly attaches to the optic head, and provides mounting using the single hole in the base of the bracket. Alternatively, the bracket will attach to the large ball-mounting (S4 LB) to provide adjustment to ensure accurate alignment on to the target surface; particularly useful when sighting onto a small target. The quick-release adapter which forms an integral part of this assembly allows rapid, no tools removal of the optic head for routine maintenance.

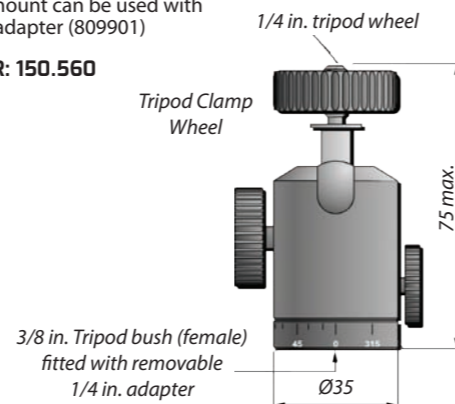
**PART NUMBER: 029.873**



### SMALL BALL MOUNT

The small ball mount can be used with the fiber-optic adapter (809901)

**PART NUMBER: 150.560**



## SIGHTING TUBES

### SIGHTING TUBES

Sighting tubes are made from metal or refractory materials and are either open ended (Type STO) or closed (Type STC).

Type STO tubes are used when viewing a solid target through flame, smoke, fumes etc. The closed end of the type STC tube is used as the target. A thermometer used with an STC tube can replace a sheathed thermocouple.

To attach the sighting tubes to a mounting plate a steel adapter (Type STA) is cemented into refractory sighting tubes. The STA is drilled to fit the studs on the mounting plate (O/N/M). Replacement Sighting Tubes can be purchased without the STA adapter fitted. Contact Land for details.

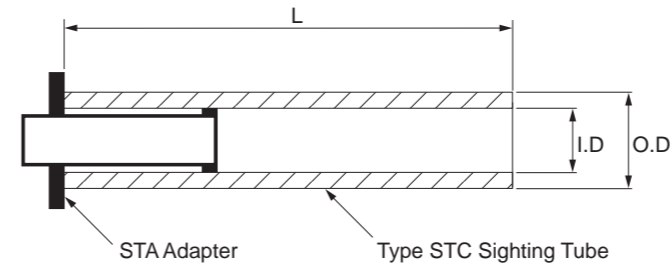
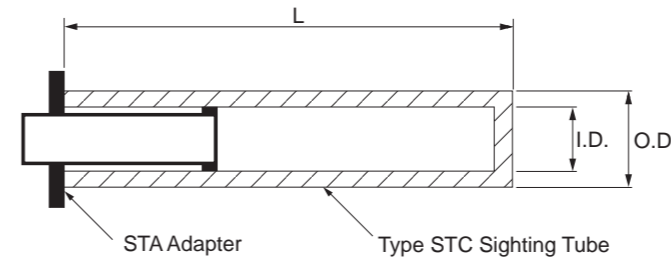
There are 3 types of tube material with varying lengths. For exact dimensions and ordering references please refer to the table adjacent.

#### Silicon Carbide Tubes (STO & STC)

These are either open ended or closed, and can be used in temperatures up to 1500°C. They have high mechanical strength, good resistance to thermal shock and very high thermal conductivity.

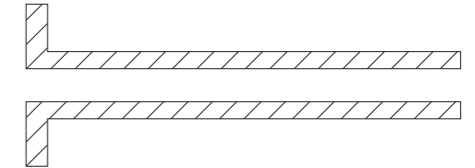
#### Sillimanite Tubes (STO only)

These are suitable for use in temperatures up to 1550°C and are fairly resistant to thermal shock. Sillimanite liner tubes are also available.



#### Stainless Steel Tubes

A low temperature tube for use up to a maximum of 800°C. The exact temperature will depend upon length and operating conditions. Used mainly to protect the thermometer window from physical damage and to direct purge air along the sight path. Stainless Steel sighting tubes come complete with own type F adapter.



#### Sighting Tube Information

Type	Dimensions in L	OD	ID	Adapter Type	Part No
Silicon Carbide STC	450	76	64	STA	091.410
	600	76	64	STA	091.411
	750	76	64	STA	091.412
	900	76	64	STA	091.413
	1050	76	64	STA	091.414
Silicon Carbide STO	450	76	64	STA	091.415
	600	76	64	STA	091.416
	750	76	64	STA	091.417
	900	76	64	STA	091.418
	1050	76	64	STA	091.419
Sillimanite STO	600	70	2.4	STA	091.420
	750	70	2.4	STA	091.421
	900	70	2.4	STA	091.422
	1050	70	2.4	STA	091.423
	1200	70	2.4	STA	091.424
Sillimanite liner tubes	355	95	3.2	-	118.270
	510	95	3.2	-	118.271
Stainless Steel FS6	150	57	54	F	091.458
	910	57	54	F	N/S

Dimensions on drawings are in mm.