

A PRODUCT OF THE SYSTEM 5 FAMILY

● FOR STANDARD BODY AND FIBER-OPTIC VARIANTS





QUALITY CUSTOMER SOLUTIONS



AMETEK LAND HAS BEEN MANUFACTURING PRECISION MEASURING EQUIPMENT SINCE 1947.

WE ARE SPECIALISTS IN NON-CONTACT TEMPERATURE MEASUREMENT AND COMBUSTION MONITORING WITH 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

SPOT *VIEWER*

Specifically developed to work seamlessly with the latest generation of industry leading single point thermometers. SPOT *Viewer'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.





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4mA

THE INSTRUMENT

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

SPOT MOUNTINGS AND ACCESSORIES







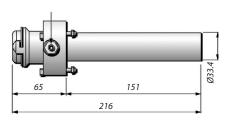
SPOT MOUNTINGS & ACCESSORIES

FIBER OPTIC MOUNTINGS

QUICK RELEASE PURGE ASSEMBLY

The 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.

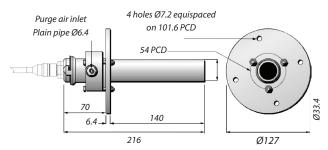
PART NUMBER: 029.870



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.

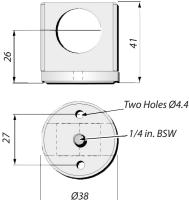
PART NUMBER: 029.871



FIBER OPTIC ADAPTER

The 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 3 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.

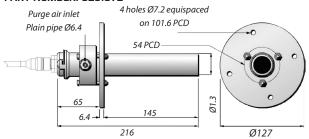
PART NUMBER: 809901



QUICK RELEASE PURGE & MOUNTING PLATE

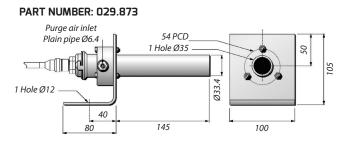
The adapter, air purge and adjustable mounting flange assembly attaches to the optic head, and provides a mounting using the four holes through the circular plate. Three studs link the main plate to a smaller plate providing adjustment to ensure accurate alignment to the target surface. The quick-release 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.

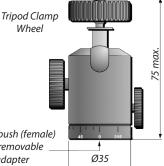


SMALL BALL MOUNT

The small ball mount can be used with the fiber-optic adapter (809901). It can be used with any standard tripod or using a 1/4" UNC bolt to a surface.

PART NUMBER: 150.560

1/4 in. tripod wheel



3/8 in. Tripod bush (female) fitted with removable _____ 1/4 in. adapter

SPOT MOUNTINGS AND ACCESSORIES

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 the refractory sighting tubes. The STA is drilled to fit the studs on the mounting plate (PN 095.091). Replacement Sighting Tubes can be purchased without the STA adapter fitted. Contact Land for details.

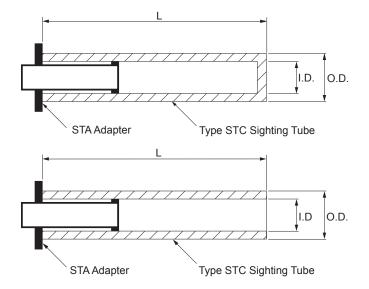
There are 3 types of tube material with various lengths. For exact dimensions and ordering references please refer to the table adjacent.

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.

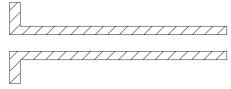
Sillimanite Tubes (STO only)

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

Туре	Dim L	nension OD	s in ID	Adapter Type	Part Nº
Silicon Carbide STC	450 600 750 900 1050	76 76 76 76 76	64 64 64 64 64	STA STA STA STA STA	091.410 091.411 091.412 091.413 091.414
Silicon Carbide STO	450 600 750 900 1050	76 76 76 76 76	64 64 64 64	STA STA STA STA STA	091.415 091.416 091.417 091.418 091.419
Sillimanite STO	600 750 900 1050 1200	70 70 70 70 70	2.4 2.4 2.4 2.4 2.4	STA STA STA STA STA	091.420 091.421 091.422 091.423 091.424
Sillimanite liner tubes	355 510	95 95	3.2 3.2	- -	118.270 118.271
Stainless Steel FS6 FS36	150 910	57 57	54 54	F F	091.458 N/S

Dimensions on drawings are in mm.



SPOT MOUNTINGS & ACCESSORIES

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 fiberoptic 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 effect on the signal strength, due to transmission losses. By specifying the process window in the instrument software, it will automatically correct for the transmission loss. (Shown with optional small pan and tilt bracket)



PART NUMBER: 808862

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

WATER COOLED MOUNTING

This incorporates the integrated Protection Jacket and Purge plus the hinged back cap. (Shown with optional small pan and tilt bracket)

PART NUMBER: 808100



MOUNTING PLATE

The Mounting Plate has four process attachment holes and three studs for the jacket. This is an optional interface between the process and and the front flangeof the water cooled mounting.

PART NUMBER: 095.091



ADJUSTABLE MOUNTING PLATE

The mounting plate has four process attachment holes and three studs to attach the water cooled mounting. This is easily adjustable to allow precise alignment with the target.

PART NUMBER: 095.168



SPOT MOUNTINGS AND ACCESSORIES



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. Supplied with mounting bracket and lock nut as standard.

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



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 consists of an Adapter Sleeve, a Lock Ring and a Replacement Cable Assembly.

PART NUMBER: 808018



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	807944
20m M12-RJ45 cable	807945
100m M12-RJ45 cable	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 M16-Free 8 Way Cable M16-Free 8 Way Cable M16-Free 8 Way Cable





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:

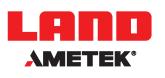




SPOTVIEWER/SPOTPRO SOFTWARE

DISCOVER HOW OUR BROAD RANGE OF NON-CONTACT TEMPERATURE MEASUREMENT AND COMBUSTION **& EMISSIONS PRODUCTS OFFER A** SOLUTION FOR YOUR PROCESS

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