

1 YEAR
WARRANTY

QUICK START

OMEGA® User's Guide



Shop online at
omega.com®
e-mail: info@omega.com
For latest product manuals:
omegamannual.info

ISO 9001
CERTIFIED
CORPORATE QUALITY
STAMFORD, CT

ISO 9001
CERTIFIED
CORPORATE QUALITY
MANCHESTER, UK

OSXL-A5SC-A 15SC-A35SC Thermal Imager Sensor

OMEGA®

OMEGAnet® Online Service
omega.com

Internet e-mail
info@omega.com

U.S.A.:
ISO 9001 Certified

Servicing North America:

Omega Engineering, Inc., One Omega Drive, P.O. Box 4047
Stamford, CT 06907-0047
Toll-Free: 1-800-826-6342
FAX: (203) 359-7700

Tel: (203) 359-1660
e-mail: info@omega.com

Canada:

976 Bengar
Laval (Quebec), H7L 5A1, Canada
Toll-Free: 1-800-826-6342
FAX: (514) 856-6886

TEL: (514) 856-6928
e-mail: info@omega.ca

For immediate technical or application assistance:

U.S.A. and Canada: Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA®
Customer Service: 1-800-622-2378 / 1-800-622-BEST
Engineering Service: 1-800-872-9436 / 1-800-USA-WHEN®

Mexico/
Latin America

TEL: 001 (203) 359-1660
e-mail: espanol@omega.com

FAX: 001 (203) 359-7700

China:

Servicing Asia:
1698 Yi Shan Road, Unit 102
Min Hang District
Shanghai, China 201103 P.R.C.
Hotline: 800 819 0559 / 400619 0559
e-mail: info@cn.omega.com

Benelux:

Servicing Europe:

Toll-Free: 0800 099 3344
FAX: +31 20 643 46 43

TEL: +31 20 347 21 21
e-mail: sales@omegange.nl

Czech Republic:

Fryslataska 184
733 01 Karviná, Czech Republic
TEL: +420-59-6311899
info@omegashop.cz

FAX: +420-59-6311114

France:

Toll-Free: 0805 541 038
FAX: 01 57 32 48 18

TEL: 01 57 32 48 17
e-mail: esales@omega.fr

Germany/
Austria:

D-75392 Deckenpfronn, Germany
Toll-Free: 0800 8266342
FAX: +49 (0) 7056 9398-29

TEL: +49 (0) 7056 9398-0
e-mail: info@omega.de

United Kingdom:
ISO 9001 Certified

OMEGA Engineering Ltd.
One Omega Drive,
River Bend Technology Centre
Northbank Irlam
Manchester M44 5BD United Kingdom
Toll-Free: 0800-488-4888
FAX: +44 (0) 161 777-6611
TEL: +44 (0) 161 777-6611
e-mail: sales@omega.co.uk

It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

WARNING: These products are not designed for use in, and should not be used for, human applications.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA'S WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA'S customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA'S Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA'S WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA'S control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA'S policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering. OMEGA is a registered trademark of OMEGA ENGINEERING, INC.
© Copyright 2012 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.

FLIR Ax/Ax5 series

The new standard in thermal machine vision cameras

The FLIR Ax/Ax5 series cameras have features and functions that make them the natural choice for anyone who uses PC software to solve problems. Available resolutions include 80 × 64, 160 × 128, and 320 × 256 pixels.

Among their main features are GigE Vision and GenICam compliance, which makes them plug-and-play when used with software packages such as IMAQ Vision and Halcon.

Key features:

- Very affordable
- Compact (40 × 43 × 106 mm/1.57 × 1.69 × 4.17 in.)
- GigE Vision and GenICam compliant
- GigE Vision lockable connector
- PoE (power over Ethernet)
- 8-bit monochrome image streaming
- 14-bit radiometric image streaming
- High frame rates (60 Hz)
- Synchronization between cameras possible
- 1x+1x GPIO
- Compliant with any software that supports GenICam, including National Instruments IMAQ Vision, Stemmers Common Vision Blox, and COGNEX Vision Pro
- Lenses: 5°, 9°, 13°, 19°, and 25° (model-dependent)

Typical applications:

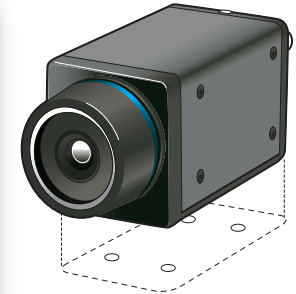
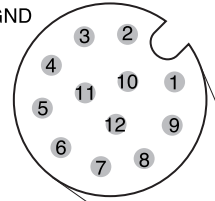
- Automation, thermal machine vision
- Entry-level “high-speed” R&D

<http://www.flir.com>
<http://support.flir.com>

Pin configuration in M12 connector

(See manual for full description)

- | | |
|----|--------------|
| 1 | RET_GB |
| 2 | PWR_GB |
| 3 | SYNC_OUT |
| 4 | SYNC_OUT_GND |
| 5 | SYNC_IN |
| 6 | SYNC_IN_GND |
| 7 | GPO+ |
| 8 | GPO- |
| 9 | GPIO_PWR |
| 10 | GPIO_GND |
| 11 | GPI+ |
| 12 | GPI- |



4x M3 threaded holes

FLIR P/N: T127605 (Cable M12 Pigtail)
 FLIR P/N: T127606 (Cable M12 Sync)

FLIR P/N: T951004
 (Ethernet cable CAT-6, 2m/6.6 ft)

FLIR P/N: T911112
 (PoE Injector)

Standards:

<http://www.genicam.org>
 (GeniCam)
<http://www.ieee802.org/3/>
 (GigaBit Ethernet)

Downloads:

<http://support.flir.com/Ax5-software>
 (FLIR Ax5 software)

FLIR P/N: T198348
 (Cable kit mains)

