

November 7, 2008 NEC Avio Infrared Technologies Co., Ltd. http://www.nec-avio.co.jp

# NEC Avio Infrared Technologies to Begin Sales of Pocket-Size, Low-Cost Thermo Shot F30 Series

Japan's smallest & lightest infrared thermography camera



NEC Avio Infrared Technologies Co., Ltd. (Head office: Shinagawa-ku, Tokyo; CEO: Shunichi Suzuki) today announced its commencement of sales of the Thermo Shot F30 Series, the newest addition to the company's infrared thermography lineup. With its updated image, this infrared thermography camera is not only affordable but also the smallest and lightest\* of its kind on the domestic market.

Infrared thermography devices are used to analyze the intensity of infrared rays naturally emitted by objects and then visualize temperature distribution. These devices are currently playing an active role in a wide range of fields in the academic and scientific instrumentation market, including non-contact measurement of electronic equipment and components, nondestructive testing of plant facilities and structures, and cutting-edge research and development applications. Infrared thermography devices are also being installed at quarantine stations in airports and seaports where they are being used for body surface temperature screenings of travelers as part of countermeasures against new strains of influenza.

The new Thermo Shot F30 Series is based on the concept of "stylish and compact." Thanks to its user-friendly design similar to that of a digital camera, an ultra-lightweight body weighing a mere 300 g and the use of eco-friendly AA-size rechargeable batteries, the cameras in this lineup fit in your pocket for easy portability and can be used anytime and anywhere to capture infrared images.

And with functions like focus-free operation and simultaneous storage of visible and thermal images as well as the use of icon operations, these infrared thermography cameras can be easily used by even entry-level users.

NEC Avio Infrared Technologies aims to not only position the new Thermo Shot F30 Series as high-priority strategic products for increasing market share in existing markets but also further expand sales in new markets and industries as well as create new application fields through thermal-loss inspection and exhaust heat evaluation in the environmental field, improved safety and security through

the security and disaster prevention market, use as an experimental teaching material in the academic field and blood circulation assessment evaluations in the health industry for sports gyms, esthetic salons and more. NEC Avio Infrared Technologies will continue to contribute to the fields of the environment, safety and security as well as utilize its innovations to achieve an information society friendly to humans and the earth.

#### Overview

Infrared Thermal Imager Thermo Shot F30 Series

#### **Product Features**

- 1) Stylish, compact and innovative design
- ♦ Ultra-lightweight body weighing approximately 300 g with an easily portable design like that of a digital camera.
- ♦ Compact enough to fit in your pocket and be taken with you anywhere.
- 2) User-friendly operation even for entry-level users (Icon menu and focus-free function)
- ♦ User-friendly icon menu and Japanese language display (Multilingual display available for 16 languages) for intuitive operation.
- ♦ Focusing unnecessary at distances of 1.3 m or more. (Focus free)
- 3) Temperature display possible for arbitrary points in visual images (Equipped with measure-on picture function)
  - ♦ Equipped with a visual camera (7.0 Megapixels), conversion display and recording of thermal and visual images are possible. Also features a convenient function with which temperatures for specified points in images taken using the visual camera can be displayed.
- 4) Recording of over 1,000 images possible through use of the SD card (compatible with JPEG data)
  - ♦ Since it is compatible with JPEG data, browsing and editing can be carried out easily via PC and thermal data analysis can be conducted using optional software.
- 5) Uses eco-friendly AA-size nickel-hydride rechargeable batteries
- 6) Three colors available (Orange, blue and black)







## **Primary Applications**

- > Repair and maintenance for power facilities, plant equipment and various production facilities.
- ➤ Thermal loss inspection and exhaust heat evaluation for use in environmental measures.
- Nondestructive inspections including perimeter wall and thermal installation diagnosis checks as well as leakage investigations.
- > Quality control of electronic substrates and die assembly facilities as well as product design evaluation.
- On-site temperature management of products at food production and processing facilities.
- Disaster prevention through the use of security and fire prevention detection applications. For further information regarding the F30 Series:

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## Note

\* Smallest and lightest among all Japanese-made infrared thermal cameras as of October 2008 according to an in-house survey.

# <Specifications>

	Model	F30W	F30S (*2)
	Measuring Range	−20 to 350° C	-20 to 100° C
Basic Specifications	Resolution	0.2°C/0.1°C(S/N improvement)	0.1°C(at 30°C)
	Infrared Detector	Uncooled focal plane array (microbolometer)	
	Spectral Range	8 to 13µm	
	Frame Time	8.5 frames/sec	
	Thermal Image Pixels	160 (H) x 120 (V) pixels	
	Field of View	28° (H) x 21° (V)	
	I.F.O.V.	3.1 mra d	
	Focusing Range	10cm to infinity (Temp accuracy not assured at 50cm or closer.	
	Focus	Manual (at 1.3m or over: Focus-free)	
	Accuracy	±2° C or ±2% whichever is greater	
Measuring Functions	Visible Light Camera	Approx. 0.7M pixels	
	Point Values	Center, max/min, movable (1 point), ∆T	
	Emissivity Correction	Provided	
	Background Compensation	Provided	
	Isotherm	Provided	
	Alarm	Display alarm, color alarm	
	Image Improvement	Provided	
	Color Palette	3 types available	
Image Display	Monitor	2.7" LCD	
Image Storage	Format	JPEG with data (for post analysis & temp scale change)	
	Storage Medium	SD card	
	Thumbnail Display	9 images	
Interfaces	USB 2.0	Provided	
	Video Output	Provided	
Power Supply	Batteries	Rechargeable NiMH batteries (3 pcs)	
	AC Power	Available with an optional AC adapter	
	Sleep Mode	Provided	
	Automatic Shutoff	Provided	
Environmental Specifications	Operating Temperature	−15 to 50° C	
	Protection	IP43	
	Dimensions	Approx. 100 x 65 x 45mm	
	Weight	Approx. 300g (incl	Approx. 300g (including 3 batteries)

Note: Above specifications are subject to change without prior notice.

<sup>(\*2)</sup> Release date of F30S is to be announced.