

INFRAOPTIC Ltd

Volume of investments required: \$ 3 260 thousand

Use of funds

R&D - 40%

Acquisition of fixed assets - 25%

Marketing - 15%

Acquisition of current assets - 20%

Company profile

1. Date of establishment – July 2005.
2. Size and source of investment to date – \$ 450 000 as investments of Russian State for 2005–2006 years.
3. Production – thermal imagers based on the uncooled Pyro Electric Thermal Image Transducer, that uses a new physical principle of transformation of IR-radiation of wavelength in the range of 8-14 microns to a visual image.
4. Target market – nondestructive inspection, diagnostic operation, security systems, supervision.
5. Sales 2004 – none.
6. Description and value of assets – intellectual property rights.
7. Goodwill and intellectual property rights – 6 patents of the Russian Federation, 3 patents are in a stage of registration. Owner of patents – a state enterprise, the question on entering into the new enterprise is solved.
8. Signs of public recognition – Silver medal and diploma on the 5th Moscow International Salon of Innovations and investments (February 2005), gold medal and diploma on the 33rd International Salon of Inventions, New Technical Equipment and the Goods «Geneva 2005» (April, 2005).

Owners

1st Individual	30%
2nd Individual	20%
3rd Individual	16%
2 Individuals	12% each
6th Individual	4%
2 Individuals	3% each
Share of government property	0%

Products characteristics

This project describes two basic commodity sections of products in the Civilian Applications Market:

1. Thermal imagers, that use uncooled PETIT with the following parameters: Noise Equivalent Temperature Difference (NETD) up to 0.05°C, resolution 320x240 and minimum level of prices.

Leading products in this group are uncooled thermal imagers for security systems, supervision, operative technical diagnostics, devices for safety on transport in conditions of bad visibility and as an antifog means.

Low cost of these commodity section products will allow to cardinaly expand the Civilian Applications Market of thermal imagers and to provide the avalanche growth of sales.

2. Thermal imagers based on PETIT with improved parameters NETD about 0.03-0.01°C, resolution 1360x1024.

High technical parameters, both operative analog and digital processing of the image allow to increase consumer properties of the products and to expand the sphere of its application: in navigation and aircraft for supervision, detection and recognition of various objects at large distances in difficult weather conditions; in carrying out search and rescue operations and works; in the field of operation and service of electrical and pipeline networks, for detection of outflow and losses of energy carriers; in construction, mechanical engineering, atomic industry and other industrial spheres for detailed monitoring of structural defects; security systems for strategic value objects; for detailed monitoring of various equipment (from electronic blocks and integrated circuits to friction in bearings.); control of degree of tanks and goods wagons filling on railway transport directly during its motion; in medicine, for diagnosis, prophylaxis, checking professional capabilities of a person.

Markets & Competition

In 2000 from the state budget the USA for IR-systems it has been allocated more than \$ 1 billion in all countries with the annual budget more than \$ 10 billion (including the USA, Japan, England, France, Germany, India and China) for these purposes have been spent about \$ 2 billion. The world market of commercial infra-red production in 2000 exceeded \$ 500 million and under the forecast of firms Flow Research and Ducker Worldwide (USA) should exceed in 2005 \$ 800 million. The greatest gain is expected on sales thermal imagers for firemen and transportation industry. The carried out researches of the potential markets show that the need in thermal imagers for civil market in the world makes about 50 ths units a year.

Considering certain operational, technological and economical factors of the production distribution and making corresponding efforts on its promotion, about 25% of the existing market are possible to win. This is about 12 ths units a year.

	Data	«Infraoptic» (Russia)	«Flir sytems» (USA)	«Raytheon» (USA)	Other
	Geographical Region – the World. Market size \$ 900 million				
2004	Company market share \$ ths / %	0 / 0%	450 000 / 50%	270 000 / 30%	180 000 / 20%
	Geographical Region – the World. Market size \$ 1600 million				
2009	Company market share \$ ths / %	64 000 / 4%	768 000 / 48%	416 000 / 26%	352 000 / 22%

Marketing & Sales

Marketing of production will be carried out by participation in the Russian and international exhibitions on the equipment of nondestructive inspection and security systems, the publication in mass-media, cooperation with existing networks of IR-systems selling, participation in tenders on state purchases.