

OOO
«TKC»

Russia, 346500 Shakhty, Karl Marx Str. 81

Phone: +7 (8636) 22-10-31

Fax: +7 (8636) 22-10-31

E-mail: elis2000@mail.ru

Volume of investments required – \$ 200 thousand

Summary

1. **Production** – Manufacture of PLC-modems for devices of automatic machinery and instrumental technique, power, housing and communal services, oil-water-gas supply, etc.
2. **Trade marks** – none.
3. **Sales 2007** – none.

Company profile

Date of establishment – March, 2008, the firm was created under the program «START 08» for the purpose of realization of scientific workings out.

Description and value of capital assets – \$32 ths; the program «START 08» «Fund of assistance to development of small forms of the enterprises in scientific and technical sphere».

Previous rounds of investments – none.

Signs of public recognition – 2 publications on the theme concerned written by Sapronov A., Leshchenko A. and Tolstenev A.

Number of employees – 8 persons.

Structure of ownership

Natural persons	100%
Aggregate share of government property	0%

Team

Leshchenko Anton Gennadevich – Director, 23 y.o. Post-graduate student of SSSU. The winner of competition "U.M.N.I.K." of 2007 «Working out of the device of reception-data transmission on an electric network 0.4 kВ for AMR systems and telemetry». Independent in thinking, can operatively make well-founded decisions, consistently and initiatively to provide their performance.

Sapronov Andrey Anatolevich – Supervisor of Studies, 43 y.o. Dr.Sci.Tech., Professor of «Radio-electronic systems» SSSU, has 70 scientific and educational-methodical works, including 2 copyright certificates, 7 patents for the invention of the Russian Federation.

And **Nikulichev A.J., Starchenko I.E., Tolstenev A.E., Nizovskaja E.V., Tvorogova V.V., Vereschagin G.R.**

Production

Offered devices (PLC-modems) are intended for transfer of any telemetric information on a distributive power electric network by a voltage of 220 V and can be used for the organization of inexpensive communication channels in the following structures:

- automated monitoring systems and the account of power resources;
- control systems of street illumination;
- control systems of remote actuation mechanisms, including «Clever house» system devices of switching of loading, adjustment of level of power consumption, etc.;
- systems of the security and fire alarm system for reception of the information from remote gauges;
- and in other systems where great volumes and speeds of an information transfer are not required, but minimization of cost of devices, reliability of communication is important.

After carried investigation of requirements of potential customers following basic specifications of the device are generated:

- reception-transfer distance on an air-line – not less than 1000 m;
- reception-transfer distance on a cable line – not less than 300 m;
- requirements to parameters of transferred signal – according ГOCT P 51317.3.8-99 (MЭК 61000-3-8-97);
- stability to signal attenuation in a line – not less than 60 dB;
- execution variants – in the separate case with an independent power supply or in the form of an affiliated payment for embedding in other products;
- interface for connection to terminal devices – RS-485;
- reorganization of bearing frequency of a signal from grid of frequencies;
- range of working temperatures – 30 to + 50°C;
- cost – no more than \$29 (without a power unit and the case).

The offered product surpasses many similar products by its characteristics.

Current state

Research and development performance.

Development strategy

Use of funds

- | | |
|----------------------------------|-----|
| 1. R&D | 20% |
| 2. Acquisition of fixed assets | 60% |
| 3. Marketing | 10% |
| 4. Acquisition of current assets | 10% |

Prospective outcome of investment

Batch production of PLC-modems.

Marketing & Markets

The general release of electric counters on territory of the Russian Federation under the data resulted in the quarterly report of Open Society "Concern the Power measure" about 5–6 million pieces a year. Proceeding from the assumption that 10–15% of an electric counters will be used as elements AMR with powerline modems, it is possible to estimate potential requirement of the market for powerline modems of approximately 500 thousand pieces in a year. Calculation of potentially possible annual volume of the market of powerline modems:

1. Planned cost price of the modem – \$17
2. Planned price of the modem – \$29 (without a power unit and the case)
3. Potential requirement of the market – 500 thousand pieces in a year
4. Potential volume of realization (item 2 x item 3) – \$14.5 mln in a year
5. Potentially possible volume of profit (2-item 1 item) x item 3 – \$6 mln in a year.

Dynamics of the market:

In 2009 the prospected volume of output is to 2000 pieces that will make 0.4% of the total number of the powerline modems made in the Russian Federation. In 2010 – increase to 10 000 pieces (2%), 2011 – to 11 500 pieces (2.3%), 2012 – to 13 000 pieces (2.6%) is supposed.

2008

1. Preparation of manufacture of the powerline modems. Equipment purchase, personnel reception, concluding contracts on delivery of accessories. Manufacturing of pre-production models. **2.** Production certification. Preparation of the documentation and carrying out of certified tests. Reception of necessary certificates. **3.** Advertising. Participation in exhibitions, publications, target address advertising. **4.** Patenting.

2009

5. Pilot production expansion. Volume of output – to 2000 pieces. **6.** Concluding contracts on small-scale deliveries with the enterprises manufacturers of electric meters and AMR systems.

2010

7. Development of small-scale manufacture. Manufacture certification. **8.** Delivery of series of production. Manufacturing and batch production delivery. **9.** Advertising. Participation in exhibitions, negotiations with customers, publications, target advertising. **10.** Concluding contracts on serial deliveries with the enterprises manufacturers of electric meters and AMR systems. Volume of output more than 10 000 pieces.

Interaction with investor

Planned share of the investor – 49%.

Financial characteristics, \$ thousand

Data	Facts			Forecast	Forecast with the investment required			
	2005	2006	2007	2008	2009	2010	2011	2012
Sales	–	–	–	–	–	60	300	350
Operating income	–	–	–	–	–	18	90	105