



UPPSALA
UNIVERSITET

Molecular Biotechnology Programme

Uppsala University School of Engineering

UPTEC X 06 015	Date of issue 2006-04	
Author	Torkel Danielsson	
Title (English)	Line inspection robot	
Title (Swedish)		
Abstract	<p>The line inspection robot autonomously inspects power lines while mounted on a live phase-line. The project to develop the line inspection robot is an initiative from ABB Corporate Research in Västerås, in collaboration with Uppsala University. Previous solutions to the line inspection problem are presented. The line inspection robot is described and analyzed. Focus is placed on mechanical design and many details are given on individual design choices and their motivation. A basic market survey and an estimation of the value of a line inspection robot are supplied.</p>	
Keywords	<p>Line inspection, mobile robot, transmission line, power distribution, autonomous robot, line-climbing, mobile monitoring, transmission line inspection.</p>	
Supervisors	Mikael Dahlgren ABB Corporate Research	
Scientific reviewer	Jakob Carlström Uppsala Universitet	
Project name	Sponsors	
Line inspection robot	ABB Corporate Research	
Language	Security	
English	2006-08-01	
ISSN 1401-2138	Classification	
Supplementary bibliographical information	Pages	
	60	
Biology Education Centre Box 592 S-75124 Uppsala	Biomedical Center Tel +46 (0)18 4710000	Husargatan 3 Uppsala Fax +46 (0)18 555217