


Name of the Technology/Product

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| Laboratory Name | CSIR-Central Scientific Instruments Organisation, Chandigarh |
| Brief Profile of Technology/Product | <p><u>Portable Pulse Oximeter</u></p> <p>Pulse Oximeter is a real time, non-invasive monitor of pulse rate (PR) and arterial oxygen saturation (SaO₂) that enables prompt recognition of hypoxemia in patients. It is standard of care in general anesthetics and also find use in neonatal care units, operation theatres, post recovery & emergency wards in hospitals and health care centers. The device provides valuable data regarding blood oxygenation and this information is obtained easily, continuously and noninvasively. Salient Technical Features of the system are as follows:</p> <ul style="list-style-type: none"> • Non invasive and Real time monitor • Alarm indications for probe disconnected, probe finger slip, SaO₂ and PR beyond range, Low battery • Beep on each pulse • Can store the trend data of upto 100 patients for 24Hrs of run time • Computer interface with real time trend facility and PC analysis software <p>The project was funded by Ministry of Communication & Information Technology, DIT (now it is DeitY), New Delhi. It was a collaborative project with Semiconductor Complex Limited (SCL), Mohali. Project was started in April 2005 and completed in December 2008. Five fully engineered prototypes of Portable Pulse Oximeter was developed in technical collaboration with SCL, Mohali and clinical trials were carried out at Deptt. of Anaesthesia, PGI, Chandigarh.</p> |
| Returns/Benefits | --- |
| Validation Level | <ul style="list-style-type: none"> • Prototype was tested and calibrated by using BIO-TEK SpO₂ simulator in the whole range of SaO₂ and Pulse Rate • Clinical trials on patients carried out at Deptt. of Anaesthesia, PGI, Chandigarh. The results of the system were compared with Datex Ohmeda System (at PGI) and found satisfactory as per our specifications |
| IPR Status [also indicating the status of the patent (if any) in 2015] | --- |
| End product price (if not available, estimated price) | <ul style="list-style-type: none"> • Approx Global Price : Rs. 75000 – 100000 • Tentative Market Price : Rs. 25000 |

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| Technology/Product Collaborator | Collaborative project with Semiconductor Complex Limited (SCL), Mohali (now it is Semi-Conductor Laboratory, Mohali) |
| Relevance of Technology in present times | Meant for use in hospitals and health care centers environment |
| Similar technology/product developed | --- |
| Picture of the technology/product (if any, with good resolution) |  |