# POWER ELECTRONICS AND DRIVES

| SL NO | PROJECT TITLE | PRICE |
|---|---|---|
| 1 | TRIAC and ZCS based AC lamp dimmer | |
| 2 | Automatic circuit breaker based on high current | |
| 3 | High voltage Fuse blow indicator | |
| 4 | Induction motor speed control based on SCR | |
| 5 | Integrated TV remote control for controlling devices using TRIAC | |
| 6 | Cell phone based home appliance control using TRIAC | |
| 7 | Electrical parameter data logger using microcontroller and PC | |
| 9 | PIR based energy conservation system for corporate devices | |
| 10 | Single phase inverter using IGBT | |
| 11 | MOSFET based inverter | |
| 12 | Series inverter | |
| 13 | MOSFET controlled speed regulation of DC motor with direction control | |
| 14 | LUX content based auto room illumination control | |
| 15 | Under and over voltage protection system | |
| 16 | Electronic soft start using ZCS for AC devices | |
| 17 | Differential relay | |
| 18 | Thyristor based variable power supply | |
| 19 | Transformer temperature protection relay | |
| 20 | MOSFET based chopper | |
| 21 | RPS design over various voltage | |
| 22 | SMPS designing | |
| 23 | SCR based half wave full controlled rectifier | |
| 24 | SCR based full wave full controlled rectifier | |

N TECHNOLOGY & RESEARCH CENTER PVT. LTD.
22/301, Acharya Vihar, Bhubaneswar -13
Ph.: 9861103279, 904008999-5/6
www.ntechnologybbsr.com

| | | |
|---|---|---|
| 25 | Bidirectional Speed Control of a 1 phase Induction Motor (PWM based) | |
| 26 | Bidirectional Speed Control of a 1 phase Induction Motor (ZVS based) | |
| 27 | Electronic Circuit Breaker | |
| 28 | Automatic utility power supply selection | |
| 29 | Controlling AC lamp dimmer through mobile phone. | |
| 30 | Transformer temperature monitoring with auto circuit breaker alarm. | |
| 31 | Measuring power quality of a System. | |
| 32 | Over voltage announcement in industries for safety purpose. | |
| 33 | Voice enabled home automation for blind people. | |
| 34 | Auto tracking antenna using steeper motor control. | |
| 35 | Soft Start of a 1-Phase Induction Motor | |
| 36 | Mobile based Tap Changer | |
| 37 | Cell phone based motor speed control. | |
| 38 | RF based Bidirectional Speed Control of College Motor XB | |
| 39 | Speed control of DC motor using CHOPPER | |

# ELECTRICAL

| SL NO | PROJECT TITLE | PRICE |
|---|---|---|
| 1 | SCADA based power control using PLC | |
| 2 | On Load Tap Changer using SSR | |
| 3 | Automatic Stabilizer | |
| 4 | Power factor correction using shunt capacitor with ZVS and ZCS | |
| 5 | Dynamic MPPT for photo voltaic array | |
| 6 | IGBT based AC output of desired magnitude and frequency | |
| 7 | Fly-back converter high voltage supply | |
| 9 | Electrical parameter data logger using Lab-VIEW | |
| 10 | An efficient home energy management system based on (AMR) Auto Meter Reading | |
| 11 | MOSFET based synchronous buck converter | |
| 12 | MOSFET based synchronous boost converter | |
| 13 | Automatic star Delta starter using relay and adjustable electronic timer for induction motor | |
| 14 | Brushless DC motor speed control at a desired rate | |
| 15 | Protection of a Three phase load from single phase over temperature | |
| 16 | 3 phase fault analysis with auto reset on temporary fault with permanent tripping | |
| 17 | Computer automated virtual instrument design using LabVIEW | |
| 18 | Signal generator instrument using Lab-VIEW | |
| 19 | Mobile phone based AC lamp dimmer | |
| 20 | IR remote based intensity control of AC bulb | |

N TECHNOLOGY & RESEARCH CENTER PVT. LTD.
22/301, Acharya Vihar, Bhubaneswar -13
Ph.: 9861103279, 904008999-5/6
www.ntechnologybbsr.com

| | | |
|---|---|---|
| 21 | SCADA implementation based on wireless technology | |
| 22 | Voice controlled device switching | |
| 23 | Touch screen based switch board design | |
| 24 | ZVS switching of Load | |
| 25 | Variable power supply using fixed voltage regulator IC with display | |
| 26 | Clap detected device control | |
| 27 | Human detecting automatic gate operation | |
| 28 | Touch screen based induction motor speed control | |
| 29 | Speed and direction of induction control using touch screen | |
| 30 | DC motor speed and direction control using H bridge and touch screen | |
| 31 | Touch screen based password operated industrial security system | |
| 32 | Touch screen based temperature monitoring and control system with GLCD | |
| 33 | Programmable load shedding time management for utilities | |
| 34 | Wireless tank water level controller with indicator | |
| 35 | Solar tracking system based on light intensity | |
| 36 | Ammeter designing for various AC application | |
| 37 | Soil Moisture based Irrigation System | |
| 38 | Electrical parameter based SCADA using wireless technology.(Four channel) | |
| 39 | IVRS System for College Database management | |
| 40 | Track failure intimation to station master using DTMF technology. (voice based) | |
| 41 | Developing a Digital Voltmeter | |
| 42 | Contact less digital Tachometer with display on LCD | |
| 43 | Wireless Device Monitoring in a Large Complex | |
| 45 | RF communications based operation of a Robotic Wheelchair (motor) | |

| | | |
|---|---|---|
| 46 | RF based data acquisition system (Temperature) | |
| 47 | RF based tank water level indicator | |
| 48 | ZIGBEE based Water level Indicator System XB | |
| 49 | Industrial Boiler Temperature Control using Wireless Communication XB | |
| 50 | GSM based electricity billing system | |
| 51 | GSM based speed control of AC fan | |
| 52 | Home security and maintenance using GSM | |
| 53 | RFID based office load management. | |
| 54 | Improving security and automation in MNC using RFID | |
| 55 | PLC using microcontroller | |
| 56 | TV remote based intelligent switch board | |
| 57 | On Load Tap Changer | |
| 58 | Wireless Energy Meter | |
| 59 | Wireless Energy Meter with Cross Checking Facility | |
| 60 | Prepaid Wireless Energy Meter | |
| 61 | Prepaid Wireless Energy Meter with Cross Checking Facility | |
| 62 | Electricity Distribution System. | |
| 63 | Intelligent Street Lighting System. (Detects traffic & turns ON lights) | |
| 64 | Power supply failure alarm with QOS of machines for industrial application | |
| 65 | Solar Powered Traffic Lighting System. | |
| 66 | Intelligent Street Lighting System. (All lights connected to central PC) | |
| 67 | PC based room lighting control. | |
| 68 | Wireless room lighting control. | |
| 69 | Remote enabled mobile charger | |
| 70 | Intelligent Room lighting. (Counts if person in room & turns ON light) | |
| 71 | Power control & logging System | |

| | | |
|---|---|---|
| 72 | Distribution Transformer Parameter Monitoring System (V,I and T monitoring) | |
| 73 | Quality test of a product. | |
| 74 | Temperature sensed FUZZY LOGIC control of a DC fan. | |
| 75 | Controlling various loads using mobile technology | |
| 76 | Ignition start enabled by the operation of a cell phone | |
| 77 | RF based Bidirectional Speed Control of College Motor (AC) | |
| 78 | RF based speed control of fan (DC) | |
| 79 | RF based speed control of fan (AC) | |
| 80 | Wireless Energy Meter with Enhanced Range of Communications XBEE | |
| 81 | Industrial Parameter Monitoring System with Intimation to Remote Control Room (VIT) XBEE | |
| 82 | Wireless Device Monitoring in a Large Complex XBEE | |
| 83 | Smart card based power management system MNCs | |
| 84 | Prepaid electricity through smart cards. | |
| 85 | Smart card based authenticated device control | |
| 86 | Shopping management with smart card | |

# SOLAR PROJECTS

| SL NO | PROJECT TITLE | PRICE |
|---|---|---|
| 1 | Design of Solar Inverter Circuit for Homes | |
| 2 | Solar Tracking Solar Panel Using micro Controller | |
| 3 | Implementation of Solar Battery Charger Circuit | |
| 4 | Solar Power Based Water Heater | |
| 5 | Solar Energy Based Cooker | |

| | | |
|---|---|---|
| 6 | Maximum Power Point Tracking for Low Power Photovoltaic Solar Panels | |
| 7 | Solar Powered Auto Irrigation System | |
| 9 | Solar Powered Coir Provostor | |
| 10 | Solar Powered LED Street Light with Auto Intensity Control | |
| 11 | Design of Solar Powered Night Lamp Circuit | |
| 12 | Solar Energy Measurement System | |
| 13 | Farmer Friendly Solar Based Electric Fence for Rural Agriculture | |
| 14 | Development of Dual-Axis Solar Tracking using microcontroller | |
| 15 | Beam Circuit Solar Engine | |
| 16 | Microcontroller Based adjustable Solar Water Heating System | |
| 17 | Solar Based Advanced Weather Monitoring System Using Wireless Sensor Network | |
| 18 | Solar Powered Automatic Rain Operated Wiper | |
| 19 | Forest Fire Detection Using Optimized Solar Powered Wireless Sensor Networks | |
| 20 | Design of Simple Solar Charger Circuit for Mobiles | |
| 21 | Self-Powered Solar Data Logger | |
| 22 | Flashlight Controlled Solar Powered Robot | |
| 23 | Design of Solar Electric Bicycle | |
| 24 | A Hybrid Wind-Solar Energy System | |
| 25 | Solar Based Wireless Power Transfer | |
| 26 | Wearable Solar Based Cool Cap | |
| 27 | A Project on Solar Chimney | |
| 28 | Solar powered Induction Motor Driven Water Pump Operating on a Desert Well | |
| 29 | Solar Powered Line Following Vehicle | |
| 30 | Solar Power Based Industrial Boiler Controller | |
| 31 | Solar Charging Handbag | |

| | | |
|---|---|---|
| **32** | **High Efficiency Photovoltaic Source Simulator with Fast Response Time** | |
| **33** | **Solar Powered Automated Fertigation Control System for Cultivation in Green House** | |
| **34** | **Sunlight Powered Steam Engine** | |
| **35** | **Lead-Acid-Battery Regulator For Solar Panel Systems** | |
| **36** | **Auto control of light using solar panel (Day Night)** | |
| **37** | **Intensity controlled street light using solar power** | |
| **38** | **Solar powered seismograph for earthquake detection** | |