ACTIVE LIGHTNING PROTECTION SYSTEMS

ACTIVE LIGHTNING STRIKE PROTECTION

- LIGHTNING PROTECTION DESIGN AND SPECIFICATION
- SYSTEMS FULLY COMPLIANT TO NFC 17-102 (2011)
- THE NEWLY DEVELOPED, MARKET LEADING, HVSC+ DOWNCONDUCTOR CAN WITHSTAND OVER 500KV
- FREESTANDING MASTS, GUYED MASTS, HINGED MASTS AND CANTILEVERED MASTS
- LIGHTNING STRIKE RISK ANALYSIS, MAPS AND REPORTS
- SOIL RESISTIVITY AND EARTH RESISTANCE TESTING
- EARTHING SYSTEM DESIGN AND CALCULATION
- CELL TOWER LIGHTNING PROTECTION AND EARTHING SYSTEMS

SURGE PROTECTION / EARTHING SYSTEMS

SURGE PROTECTION SYSTEMS

- DIN-LINE 1PH SURGE FILTERS UP TO 20A
- 1PH & 3PH SURGE FILTERS 32A-1750A
- 50kA - 200kA SURGE DIVERTERS
- TELECOMMUNICATIONS, DATA AND SIGNAL LINE PROTECTION

EARTHING PRODUCTS

- COPPER, TINNED COPPER AND ALUMINIUM TAPE
- GROUND RESISTANCE IMPROVEMENT POWDER
- PIPE JOINT & TRANSIENT EARTH CLAMPS
- EARTH PITS, EARTH BARS AND EARTH TERMINALS
- STAINLESS STEEL & COPPER EARTH RODS
- CHEMICAL EARTH RODS
- COPPER CLAMPS, JOINERS AND ACCESSORIES
CONVENTIONAL LIGHTNING PROTECTION
SYSTEMS COMPLIANT WITH AS/NZS: 1768

CONVENTIONAL LIGHTNING PROTECTION
- STRANDED COPPER OR ALUMINIUM CABLE
  WITH ADHESIVE OR DRILLED OPTIONS
- LIGHTNING PROTECTION DESIGN AND SPECIFICATION
- SYSTEMS COMPLIANT TO AS/NZS: 1768
- COPPER & ALUMINIUM TAPE CONDUCTORS
- LIGHTNING STRIKE RISK ANALYSIS, MAPS AND REPORTS
- SOIL RESISTIVITY AND EARTH RESISTANCE TESTING
- EARTHING SYSTEM DESIGN AND CALCULATION
- CELL TOWER LIGHTNING PROTECTION AND EARTHING SYSTEMS

EXOTHERMIC WELDING / EARTH POINTS

EXOTHERMIC WELDING EQUIPMENT
- CUSTOM MOLDS MANUFACTURED AT SHORT LEAD TIMES
- MANUAL OR REMOTE IGNITION SYSTEM
- SUPERIOR BONDING METHOD WHERE HIGH QUALITY CONNECTIONS ARE REQUIRED
- WELD METAL, MOLDS AND ACCESSORIES
- EQUIPMENT HIRE AND TRAINING AVAILABLE

EARTH POINT TERMINALS
- 1, 2 & 4 HOLE TERMINALS AVAILABLE
- XLPE, PVC OR BARE CABLE TYPES
- ALL CABLE SIZES AND LENGTHS AVAILABLE
- MILD STEEL, BRONZE TERMINAL OR BARE END
SMART POWER METERS & POWER ANALYZERS

- SWITCHBOARD PANEL POWER ANALYZERS, FEATURING HARMONIC, THDI, THDV, MEASUREMENT
- NEW B100/B150 RANGE FEATURING A LARGE FULL COLOUR DISPLAY UP TO 150MM WIDE
- PORTABLE POWER ANALYZERS WITH REALTIME WAVEFORMS, RECORDING CAPABILITIES AND FULL COLOUR DISPLAY
- SMART BILLING METERS FOR PRECISE USAGE DATA AND HISTORICAL RECORDS FOR FAULTFINDING
- 3G, WIFI OR LAN CONNECTED POWER ANALYZERS TO ALLOW REMOTE MONITORING WITH NO INTERRUPTION TO LOCAL NETWORK

CURRENT TRANSFORMERS

- COMPLETE RANGE CONTAINING ALL BUSBAR/CABLE SIZINGS
- SPLIT-CORE CTs FOR EASE OF INSTALLATION
- MEASUREMENT SHUNTS AND TRANSFORMERS
- LOW, MEDIUM AND HIGH VOLTAGE CTs AVAILABLE
- PREWIRED 3 PHASE MC3 RANGE SPECIFIC TO CIRCUTOR

SELF RECLOSEING MCB & RCDs

- CIRCUIT BREAKER PROTECTION WITH AUTOMATIC RECLOSEING SYSTEM
PFC CONTROLLERS, POWER FACTOR CORRECTION & HARMONIC FILTERING

- STATIC, AUTOMATIC AND DETUNED POWER FACTOR CORRECTION SYSTEMS
- CONTACTOR, THYRISTOR OR HYBRID SWITCHING
- ‘PLUG & PLAY’ CONTROLLERS ALLOW ONE TOUCH UNIT INITIALISATION
- ACTIVE HARMONIC FILTERING AND PASSIVE FILTERS
- INDIVIDUAL COMPONENTS AVAILABLE, INCLUDING CAPACITORS, REACTORS, CONTROLLERS, CONTACTORS, THYRISTORS, ETC.
- CAPACITOR RATINGS FROM 400V TO 525V

ASK US ABOUT OUR ELECTRICITY INVOICE SIMULATION SOFTWARE

CIRCUITOR
Heavy Duty Capacitors

Robust, reliable and safe

Higher temperature strength 65 °C short time

Longer lifetime 150,000 h
ASCO® AUTOMATIC TRANSFER SWITCHES

- 2 & 4 POLE CONFIGURATIONS
- OPEN, CLOSED, DELAYED TRANSITION & SOFT LOAD MODES
- INTEGRAL 2-WAY MAINTENANCE BYPASS
- SWITCHED NEUTRAL OPTIONS
- CLOSED TRANSITION TRANSFER SWITCHES APPROVED BY ALL MAJOR POWER COMPANIES FOR GRID CONNECTION IN NEW ZEALAND
- 600VAC, UP TO 4000 AMPERES
- CLOSED TRANSFER / SOFT LOAD SWITCHES FOR PEAK LOPPING AND CO-GENERATION APPLICATIONS
- COMPREHENSIVE WARRANTY AVAILABLE
- MAJOR INSTALLATIONS COMPLETED THROUGHOUT NZ
- FULLY COMPLIANT WITH AS/NZS3947-6-1

EMERSON THERMAL MANAGEMENT

- ECONOMIZER SYSTEMS USING COOL OUTSIDE AIR TO REDUCE ENERGY USAGE
- CHILLED WATER, AIR AND GLYCOL OPTIONS
- PRECISION CONTROL OF HEAT AND HUMIDITY
- ALL UNITS PRE-PIPED AND TESTED DURING THE MANUFACTURING PROCESS
- DUAL REFRIGERATION CIRCUITS FOR REDUNDANCY

EMERSON UNINTERRUPTIBLE POWER SUPPLIES

- 97% EFFICIENCY IN DOUBLE CONVERSION MODE
- 1KVA UP TO 1200KVA AND ABOVE
- TRANSFORMER FREE TOPOLOGY
- REMOTE MONITORING AVAILABLE
- FULL SERVICING AND MAINTENANCE AVAILABLE BY FACTORY TRAINED TECHNICIANS
THYCON POWER
QUALITY EQUIPMENT

THYCON AUTOMATIC POWER REGULATORS

- 20 YEAR DESIGN LIFE
- STATIC SYNCHRONOUS COMPENSATOR OPERATION
- LAG/UNITY OR LAG/LEAD COMPENSATION
- 100KVAR TO 600KVAR OR MORE IN CAPACITY
- THYRISTOR SWITCHING / NO CONTACTORS
- REDUCED MAINTENANCE COMPARED WITH CONTACTOR SYSTEMS
- STEP-LESS SWITCHING WITH NO MINIMUM CAPACITANCE
- DETUNED CAPACITORS AND CHOKES PASSIVELY ABSORB SYSTEM HARMONICS

THYCON TRIPLEN AND PHASE SHIFTING TRANSFORMERS

- 30 YEAR DESIGN LIFE
- THIRD HARMONIC ELIMINATION OR INTERPOLATION OF SIX PULSE HARMONICS TO CREATE THD REDUCTION
- COMPUTER GRADE QUALITY POWER
- FOIL WOUND TRANSFORMERS, NO MOVING PARTS
- ALLOWS REDUCTION IN NEUTRAL CABLE SIZING FOR NEW INSTALLATIONS

THYCON UNINTERRUPTIBLE POWER SUPPLIES

- 10KVA UP TO 10MVA AND ABOVE
- SOFT START CONTROL
- LOW INPUT I-THD
- LOW OUTPUT V-THD
- HIGH OVERLOAD & FAULT CURRENT RATING
POWERMASTER UNINTERRUPTIBLE POWER SUPPLIES

1-10 KVA UPS RANGE
- 1 / 1.5 / 2 / 3 KVA CAPACITIES AVAILABLE
- 19” RACK MOUNTABLE OR STANDALONE
- TRUE ON-LINE DOUBLE CONVERSION
- POWER SHEDDING ON NON-CRITICAL LOADS
- BYPASS SWITCHES AVAILABLE FOR SAFE DISCONNECTION OR REPLACEMENT OF A UPS

UPS RANGE UP TO 520KVA
- LOW INPUT CURRENT DISTORTION
- HIGH EFFICIENCY
- LOCAL & REMOTE ACCESS POWER OFF
- TOUCH SCREEN LCD
- PROGRAMMABLE BATTERY VOLTAGE
- 19” RACK MOUNTABLE, 3U HIGH
- SNMP, ALARM RELAY CONTACT AND SERIAL COMMUNICATION

ENERGY MANAGEMENT SYSTEMS

LIVE DISPLAY OF ON-SITE ELECTRICAL PARAMETERS FOR DISPLAY OR BUILDING MANAGEMENT PURPOSES
- REMOTE ACCESS OVER 3G/GPRS NETWORK USING STANDARD SIM CARDS
- AUTOMATIC EVENT OR USAGE NOTIFICATIONS OVER TEXT MESSAGE & EMAIL
- CIRCUTOR POWERSTUDIO SYSTEM HAS BEEN TESTED, DEPLOYED AND IS IN USE BY MAJOR CLIENTS IN NZ

VISIT POWERSTUDIO.CIRCUTOR.COM FOR AN INTERACTIVE DEMONSTRATION OR CHECK OUT THE LPINZ DEDICATED 3G REMOTE MONITORING SITE ONLINE TO ACCESS THE 3G DEVICE AT OUR AUCKLAND HQ AT: EDS3G.DYNALIAS.COM
PV SYSTEMS & ELECTRIC VEHICLE CHARGING

ELECTRIC VEHICLE CHARGING

- 15 MINUTE ‘FAST-CHARGE’ TECHNOLOGY
- MAXIMUM PEAK DEMAND REDUCTION TECHNOLOGY
- PREPAID, SWIPE CARD, COMMERCIAL AND PRIVATE CAR PARK SYSTEMS
- INDOOR, OUTDOOR AND WALLMOUNT SYSTEMS
- SOLAR CANOPY WITH VEHICLE CHARGING INTEGRATION

CIRCUTOR HELPED CREATE THE FIRST AUSTRALIAN ELECTRIC HIGHWAY FROM PERTH TO AUGUSTA

SOLAR PANEL SYSTEMS

- 25 YEAR / 80% OUTPUT GUARANTEE
- SINGLE SOURCE FOR FRAMING, SOLAR PANELS, INVERTER, CONTROLLER AND ELECTRONIC EQUIPMENT GUARANTEES OPTIMUM SYSTEM FUNCTIONALITY
- PRE-WIRED CONTROL BOX ALLOWS ‘PLUG & GO’ CONNECTIVITY
- ENERGY STORAGE SYSTEM OPTIONS
- GRID CONNECTED & ISOLATED SYSTEMS AVAILABLE
- SYSTEMS FROM 1.5 KW TO OVER 160 KW
- HYBRID SYSTEM DESIGN AVAILABLE FOR INTEGRATION WITH MULTIPLE POWER SOURCES

PARKING GUIDANCE SYSTEMS

- INTEGRATED EMERGENCY LIGHTING SYSTEM
- LICENSE PLATE RECOGNITION AND SURVEILLANCE OPTIONS
- IMPROVES QUALITY OF SERVICE AND REDUCES TIME TO FIND A PLACE
- STATISTICAL DATA COLLECTION AND USER INTERFACE INTEGRATION WITH OTHER CIRCUTOR EQUIPMENT
HV & INSTRUMENT TRANSFORMERS
KONCAR POWER TRANSFORMERS

- REFERENCE SITES IN NZ, AUSTRALIA & WORLDWIDE
- SUBSTATION TRANSFORMERS INCLUDING HVDC
- GENERATOR TRANSFORMERS
- INSTRUMENT TRANSFORMERS
- SUBSTATION EARTHING DESIGN
- MV & HV CAPACITOR BANKS
- EXOTHERMIC WELDING FOR SUBSTATIONS
- LV, MV & HV POWER MONITORING, AUDITS AND EQUIPMENT
- TEMPORARY OR PERMANENT LV, MV & HV ENERGY MANAGEMENT SYSTEMS

GENERATORS
CUMMINS & PERKINS GENERATORS

- OPEN OR SILENT TYPE GENERATORS WITH CANOPIES
- LIGHTING TOWERS OR TRAILER MOUNTED OPTIONS
- CONTAINER TYPE GENERATORS
- SIZES FROM 4 KVA TO OVER 1,500 KVA
- PETROL OR DIESEL OPTIONS
- POWERMASTER STANDARD BRAND ALSO AVAILABLE
SERVICES PROVIDED BY LPINZ
TESTING, MONITORING AND INSTALLATION

ACTIVE & PASSIVE LIGHTNING PROTECTION SYSTEMS
- RISK ANALYSIS AND METSERVICE REPORTS
- SYSTEM DESIGN AND SPECIFICATION
- INSTALLATION, COMMISSIONING AND CERTIFICATION
- EARTH EQUIPMENT TRENCHING AND INSTALLATION
- SYSTEM INSPECTION AND ANNUAL MAINTENANCE
- SOIL RESISTIVITY AND EARTH RESISTANCE TESTING

POWER QUALITY & FILTERING SYSTEMS
- DIRECT POWER MONITORING USING CIRCUTOR OSCILLOSCOPE
  FOR TRANSIENT DETECTION AND EQUIPMENT ANALYSIS
- MID TO LONG TERM MONITORING ON MULTIPLE SYSTEMS
  SIMULTANEOUSLY WITH ISSUE OF FORMAL REPORT
- REMOTE POWER MONITORING OVER 3G OR ETHERNET
- THERMAL IMAGING AND POWER QUALITY AUDITING
- PFC SYSTEM INSPECTION AND MAINTENANCE
- MV & HV POWER AUDITING AND REPORTING
- VTHD/ITHD HARMONICS, POWER FACTOR, LOAD PROFILE
- PFC AND HARMONIC FILTER INSTALLATION AND COMMISSIONING

SEMINARS, TRAINING AND PRESENTATIONS

LPINZ REGULARLY HOLDS PRESENTATIONS SHOWCASING THE LATEST POWER QUALITY TECHNOLOGY,
AS WELL AS PROVIDING INFORMATION AND ADVICE ON MODERN ISSUES SUCH AS POWER FACTOR CHARGES,
HARMONIC MITIGATION AND LARGE SCALE POWER FACTOR CORRECTION.
TRAINING ON THE USE OF TECTOWELD EQUIPMENT AND CIRCUTOR SOFTWARE AND SYSTEMS IS ALSO AVAILABLE
Partial List - References, Projects & Clients

- Sky Tower
- Lion Nathan Breweries
- Middlemore Hospital
- Christchurch/Lyttleton Port
- Auckland International Airport
- Watercare Wastewater Treatment Plant
- Auckland Museum
- Waterview Tunnel
- University of Auckland
- Sky TV
- M.I.T and Transport Exchange Manukau
- ASB Bank - Greenlane
- AUT
- Fonterra
- Gemini
- Gisborne WWTP
- Grace Hospital
- Hutamaki
- Leader Products
- Manukau Institute of Technology
- North Shore Hospital
- Novotel
- NZ Police
- Philips Healthcare
- Prime Panels
- Fiji, Samoa and Rarotonga
- Solid Energy Mines
- SRG - Specialist Radiology + MRI
- Student Accommodation building
- Telecom
- The Warehouse
- TVNZ
- Two Degrees
- Vodafone Fiji
- Vodafone Building Christchurch
- VisionStream
- Waikato Hospital
- Watercare Mangere & Rosedale

-appointed as a services and equipment provider for Contact Energy and their customers-

Partial List - Pacific Projects & Clients

- Rarotonga - Avatiu Power Station
- Samoa - MESC
- Tonga - Taumeopau
- Tonga - City Assets Building
- Tonga - Tungi Arcade
- Samoa - SNPF Molesi
- Samoa - Faleolo Hospital
- Projects with AJYNK Electrical
- Tonga - Cable Landing Station
- Fiji - Vodafone Teleco Tower
- Fiji – Fiji National University
- More projects in development…
TELCO & DATACENTRE PROJECTS

SPARK / TELECOM
ACTIVE LIGHTNING PROTECTION SYSTEM
SURGE FILTERS
SURGE DIVERTERS
POWER QUALITY AUDITING

TWO DEGREES
ACTIVE LIGHTNING PROTECTION SYSTEM FOR DATA CENTRE
EARTHING EQUIPMENT FOR CELL TOWERS

VODAFONE NZ
ACTIVE LIGHTNING PROTECTION SYSTEM FOR TELCO TOWERS
AND CHRISTCHURCH HEADQUARTERS

VODAFONE FIJI
ACTIVE LIGHTNING PROTECTION SYSTEM FOR TELCO TOWERS

MANUKAU INSTITUTE OF TECHNOLOGY
DAVIES AVE, MANUKAU

FINAL INSPECTION & CERTIFICATE OF COMPLIANCE WITH AS/NZS:1768 ISSUED

1750A SURGE FILTER INSTALLED ON THE MAIN INCOMING SWITCHBOARD
PASSIVE FILTERS & AUTOMATIC POWER REGULATORS/ACTIVE POWER FACTOR REGULATOR
CIRCUITOR ACTIVE HARMONIC FILTER
CONVENTIONAL LIGHTNING PROTECTION SYSTEM
FULLY COMPLIANT WITH THE NEW ZEALAND STANDARD AS/NZS: 1768
AUCKLAND MUSEUM
TURNKEY PROJECT

ACTIVE LIGHTNING PROTECTION SYSTEM
CUSTOM HINGED MAST AND BASE FOR EASY ACCESS & MAINTENANCE

LION NATHAN BREWERIES, EAST TAMAKI

ACTIVE LIGHTNING PROTECTION SYSTEM

AUCKLAND AIRPORT
TURNKEY PROJECT

ACTIVE LIGHTNING PROTECTION SYSTEM
CUSTOM HINGED MAST AND BASE FOR EASY ACCESS & MAINTENANCE

SPECIALIST RADIOLOGY
- CAVENDISH DRIVE
- ASCOT PARK

ACTIVE LIGHTNING PROTECTION SYSTEM

TURNKEY PROJECT
WATERCARE WASTEWATER TREATMENT PLANTS:
  - MANGERE
  - ROSEDALE

LARGEST WASTEWATER TREATMENT PLANT IN THE SOUTHERN HEMISPHERE

ACTIVE LIGHTNING PROTECTION SYSTEM

SOIL RESISTIVITY TESTING AND REPORT TO ENSURE OPTIMUM EARTHING

CUSTOM 17 METRE MAST TO ENSURE OPTIMUM COVERAGE

NORTH SHORE HOSPITAL
AUCKLAND

LPINZ HAS COMPLETED PROJECTS AT:
  - MIDDLEMORE HOSPITAL
  - WAITAKERE HOSPITAL
  - GRACE HOSPITAL
  - WAIKATO HOSPITAL
  - NORTH SHORE HOSPITAL

1750A SURGE FILTER INSTALLED ON THE MAIN INCOMING SWITCHBOARD

ACTIVE LIGHTNING PROTECTION & CONVENTIONAL LIGHTNING PROTECTION SYSTEMS INSTALLED

AUTOMATIC POWER REGULATORS/ACTIVE POWER FACTOR REGULATOR

ACTIVE HARMONIC FILTERS

CIRCUTOR DETUNED CAPACITOR BANK WITH HARMONIC BLOCKING REACTORS

FULLY COMPLIANT WITH THE NEW ZEALAND STANDARD AS/NZS: 1768
LPI-NZ was selected to provide the lightning protection system for NZ’s most prominent building, the Sky Tower.

**SKYTOWER**  
**VICTORIA ST WEST, AUCKLAND CBD**

- **ACTIVE LIGHTNING PROTECTION SYSTEM**
  - TALLEST INSTALLATION IN THE SOUTHERN HEMISPHERE

- **FINAL INSPECTION COMPLETED AND LPI CERTIFICATE OF COMPLIANCE ISSUED**

- **CIRCUTOR CAPACITOR BANKS FOR POWER FACTOR CORRECTION**