LEDline® Cut Sheet

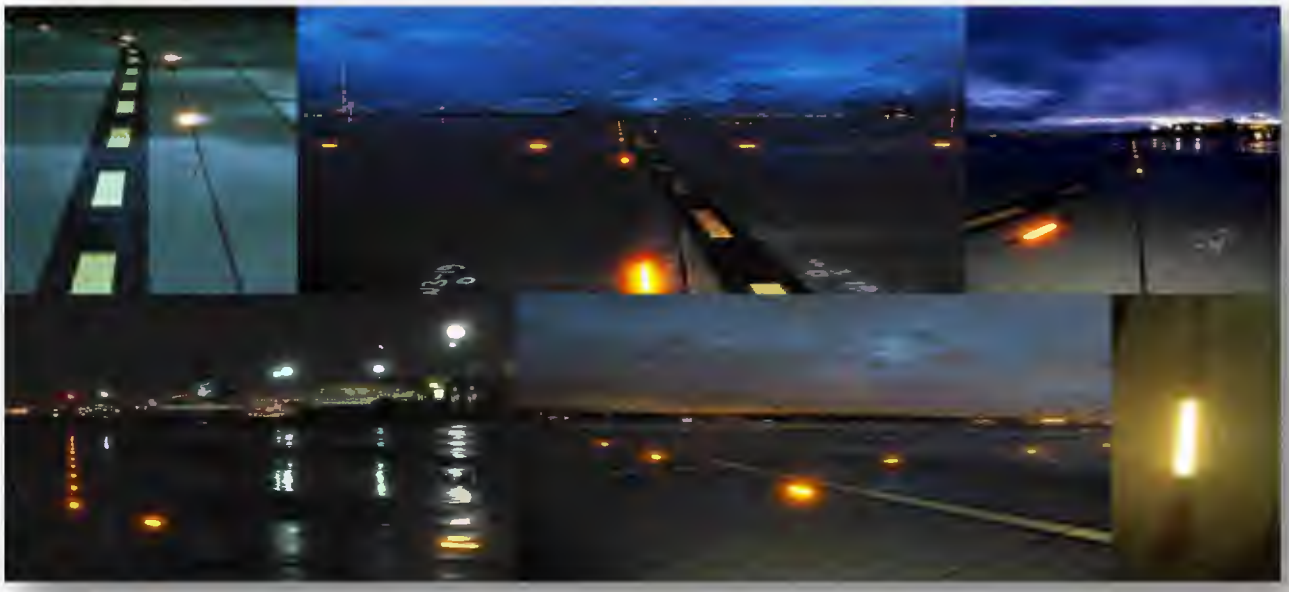
Contents

LEDline® Visibility: At Anchorage International, highly visible, yellow, six (6) x LED, linear LEDline® and standard green FAA taxiway lights are seen in identical deep snow weather conditions. **Both are highly visible.**

LEDline® is the only LED light source that melts snow without having any additional heating elements!
Here, the FAA green taxiway lamps are melting the snow because of their Halogen/Incandescent bulbs which deliver more heat than light. Today's modern LED in-pavement lights **MUST have added heating elements to melt snow**.

LEDline® at Vancouver International's De-icing Pads, Installed in the fall of 2009.

(Note: As of April 2025, LEDline® is still operating so has been working 24/07 for +15 years and counting).

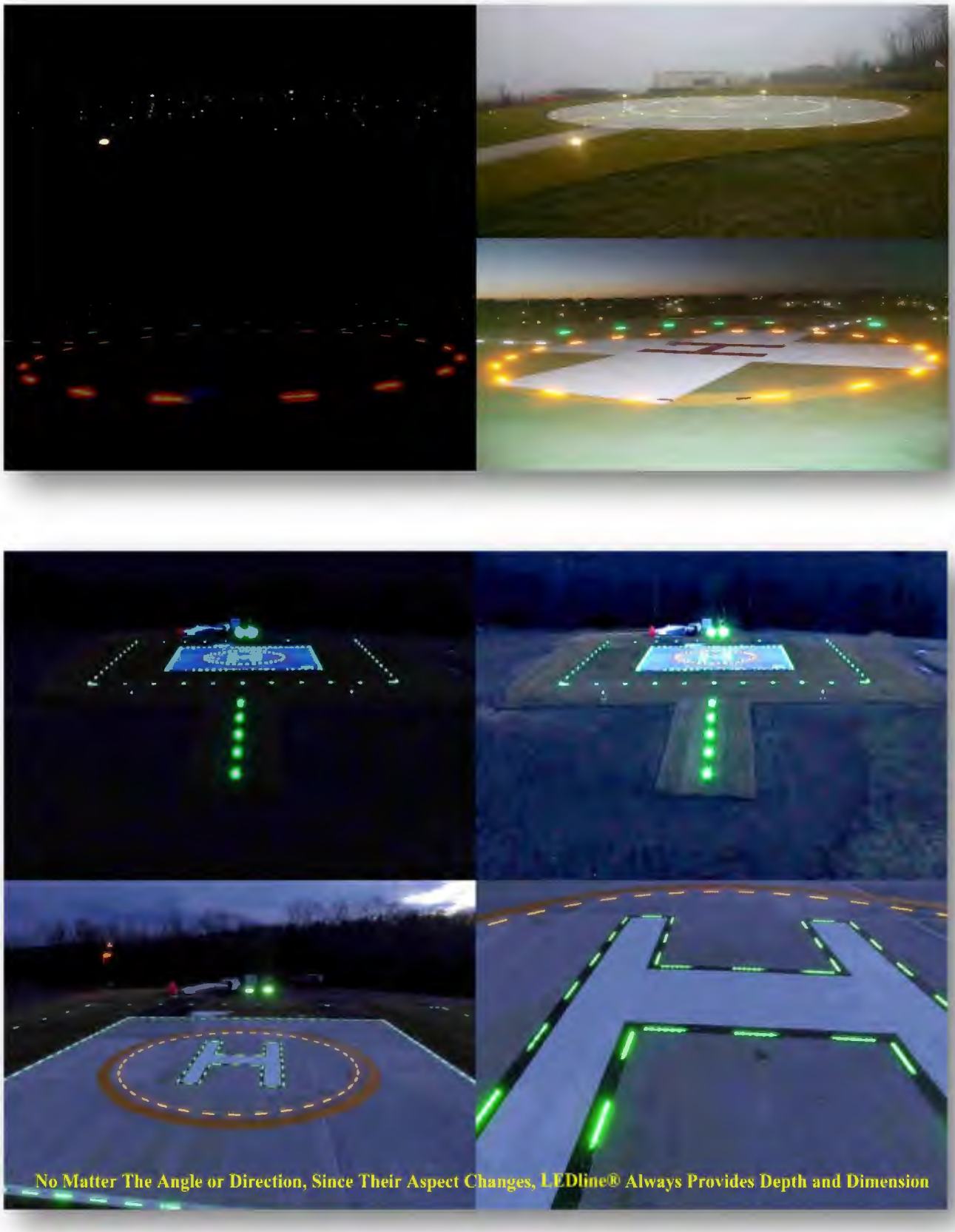


Linear LEDline® Lit In-pavement Signage for Improving Airfield Driver and Pilot Guidance and Situational Awareness To Reduce Runway Incursions

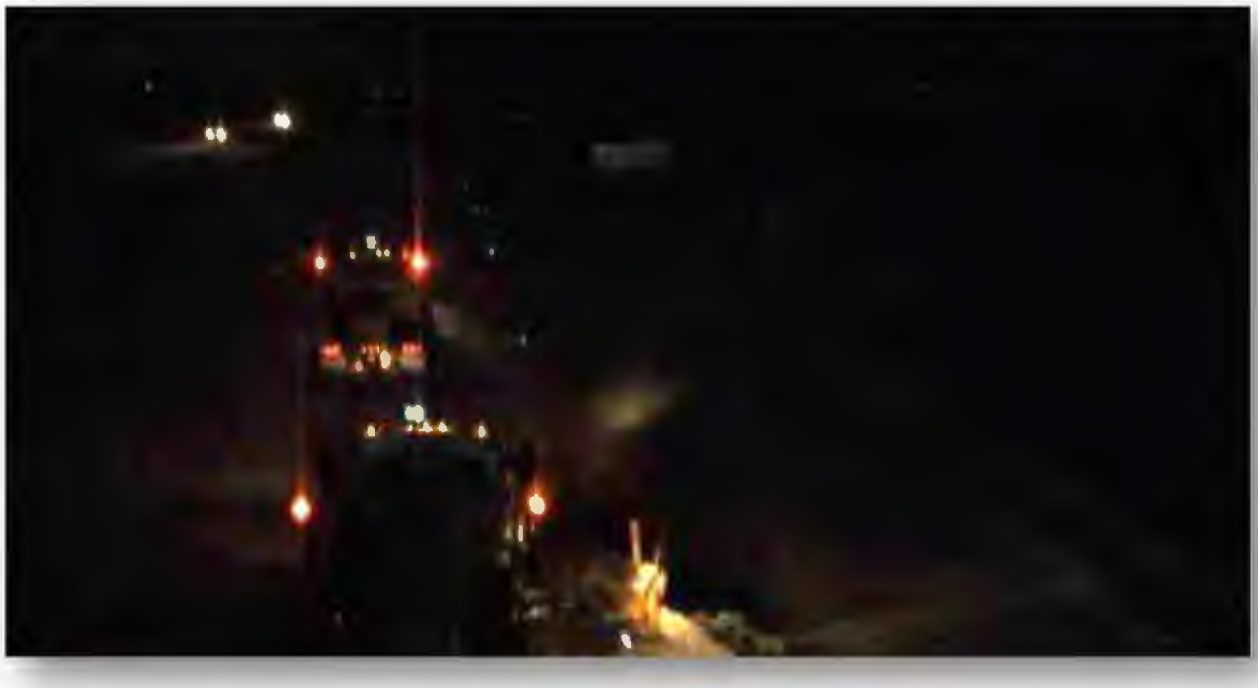
Reduce or Eliminate Issues on Roads by Improving Driver Guidance and Situational Awareness!

Improving Ramp Worker and Aircraft Safety and Gate Efficiency With LEDline®

Everyone Loses Depth Perception At Night. With point sources, because there is no "pattern" (one cannot tell which light is next to or in front of another), therefore, unless one is viewing them in parallel or is above them, point sources with no pattern cause confusion.



LEDline® Being Snow Ploughed on The Ontario 403 Freeway: (The picture taken from a video in a major storm).



At the Chesapeake Bay Bridges LEDline® Helps Guidance at Their Rush Hour Contraflow Control.

FHWA Crosswalk Trial:

Product Description:

LEDline® is a linear visual aid guidance lighting system, so each unit indicates the position and the direction to travel. It consists of linear arrays of high-intensity (daylight visible) light-emitting diodes ("LEDs"). The unique, proprietary design incorporates a heat sink and custom precision optics, depending on the application requirements. All these components are fully encapsulated in a solid, durable clear matrix, a formulation specifically engineered to make it completely submersible, tough, chemical and weather resistant, and able to withstand the challenges of various extremely harsh environments. For more details, see www.ledline.net

Whilst LEDline® can be powered via solar arrays or DC, for in-pavement applications, LEDline® takes anything from 90 – 220VAC 60Hz mains power line, then via an induction, non-contact, (no hard-wired), low-powered series circuit, powers the LEDline®.

With the LEDline® induction power pick-up connectors, it makes no difference if the environment is wet, salt-laden or if the product is covered with chemicals like glycol or other airfield de-icing fluids, as the LEDline® and the glue-buried non-contact power connectors are also completely submersible. With a low-powered AC series circuit, power is induced into the LEDline® lamps via the completely sealed, hopefully never cut or spliced power cable and its induction power pickup connector.

The direct burial power line, bringing power to the lights, should not be cut or spliced, so it continues to benefit and has all the manufacturer's full cladding and protection, extending its life and preventing corrosion.

Non-contact (no Hardwiring) In-pavement Induction Power Connectors

Non-contact (No Hardwiring) In-pavement Induction Power Connectors and their IP69K Quick Disconnects.

IP69K Waterproof, Submersible, Quick Lamp Connector Disconnect.

For easy lamp maintenance, each LEDline® lamp unit comes with a quick disconnect, a nickel-plated brass locking, screw together, IP69K waterproof connector. (IP69K Specifications = "Protected against ingress of dust and high temperature and close-range high pressure, high-temperature spray downs").

This connector allows the non-contact induction power connector at the power cable to be buried in the glue and not accessible, yet should a replacement LEDline® lamp be required, the highest rated IP69K connector, is easily accessible

for the replacement of the LEDline® unit in about a minute.

Below is An Illustration of The Components of An LEDline® Lamp:

- The upper section features an empty Mounting Plate, which is designed to be affixed into pavement grooves. This plate subsequently accommodates the LEDline® lamp. The Mounting Plate is supplied with six screws (three on each side), pre-installed. If the nut is misplaced, these screws prevent the LEDline® from being removed directly from the Mounting Plate. For this reason, both the nut and retainer at the opposite end must first be detached, after which the LEDline® lamp can be carefully lifted and slid out, allowing access to the IP69K connector located beneath its cover lid.
- Shown are the nut, retainer, and the Mounting Plate's inverted IP69K connector cover.

- The LEDlineSunDV™ lamp, which is a semi-directional model, is equipped with an IP69K connector. Upon closer inspection, you will notice a flat rod positioned on each side of the LEDline® lamp. These flat rods are essential, as they secure the lamp within the Mounting Plate.

  To remove the lamp from the Mounting Plate, the process begins with sliding the two flat rods out from the IP69K connector cover. This cover is firmly held in place by six screws—three on each side. Only after the rods have been removed and the screws loosened can the lamp be taken out of the Mounting Plate.

IP69K Quick Lamp Disconnect Connector

Specifications:

LEDline® was designed to meet the needs of extreme environments like the transportation industry by enhancing the visibility of pavement markings in all conditions that pilots or motorists find challenging. When illuminated, the LEDline® system can be seen at night, at dusk, under intense rain, with the wash of headlamps, under some +178mm (7") of snow (it melts holes in snow), and in sunlight. The twelve (12) x embedded LED system meets all the previous conditions and is even more visible in daylight/sunlight.

LEDline® products come in various standard LED colors for airfields, helipads, roads, or military use.
Custom LEDs with IR (infrared) or UV (ultraviolet) spectrum can also be ordered.

There are several alternative LEDline® visual aid products;

- LEDlineDV™ (semi-directional) with six (6) embedded LEDs and optics that send most of the LED's light towards the viewer.
- LEDlineHB™ (Omni-directional) with six (6) embedded LEDs, where the lamp can be easily seen from ant direction, (360° around).

And the LEDlineSun™ products (sunlight visible) has up to twelve (12) x embedded LEDs within the clear solid matrix. This is by far the brightest system and is suitable for sunlight-visible applications. LEDlineSun™ comes in two types;

- LEDlineSunDV™ (Semi-directional) with twelve (12) x embedded LEDs and optics that send most of the LED's light towards the viewer.
- LEDlineSunHB™ (Omni-directional) with twelve (12) x embedded LEDs, where the lamp can be easily seen from ant direction, (360° around).

Dimension of an LEDline® Unit:
LEDline® Lamp Unit: Nom. Size: See drawings HT-6252
Length; 44cm (17.3")
Width: 40mm (1.6")
Height: 23.5mm (0.93")

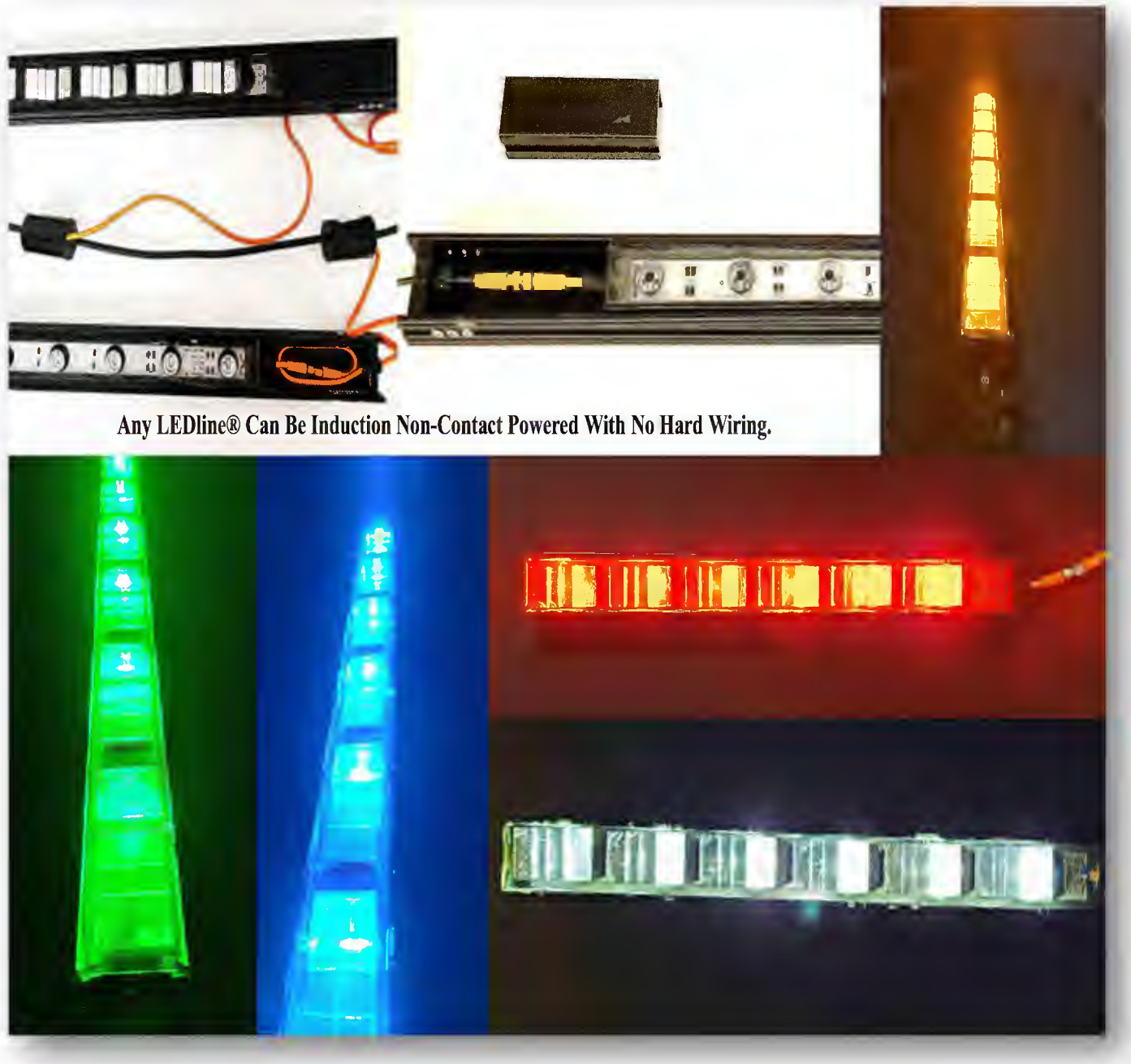
The LEDline® Lamp Unit within its In-Pavement Mounting Plate: Nom. Size: See Drawing HT-6353
Length: 625mm (24.6")
Width: 48mm (1.9")
Height: 28.5mm (1.1")

Weight: LEDline® Mounting Plate and Lamp**:** 1.36 kilograms (3 lbs.) LEDline® lamp: 0.77 Kilograms (1.7 lbs.).

LED Colour Options: Any color of LEDs can be used within LEDline®, including infrared (IR) or Ultraviolet (UV), although the latter two colors are custom special-order units.

Wiring, LED Back Up: The LED arrays within the solid clear matrix are organized into a series/bypass circuit. As such, should one LED fail prematurely, the others will continue to function normally. This means that unlike most LED lamps, if one LED fails the lamp is useless. With LEDline® because of the wiring series/bypass circuit, there is still light coming from the LEDline® unit so there is backup if one or more LEDs fail prematurely.

Below Are Induction non-contact Power Pickup connections and The IP69K Submersible Quick Disconnect With **Semi-directional LEDlineSunDV™** Units of Various Colors. LEDline® omni-directional units are also available in these standard colors.



LEDline® Is Tough, Completely Submersible, and Highly Chemical and Weather Resistant: Systems have operated in de-icing pads for years without being affected by the de-icing pad chemicals like Glycol.

Unusual Survivability Tests:

Road: The LEDline® is normally embedded into the pavement slightly below with the surface so it is not damaged by snowplows as they pass over it. And, since the LEDs with their precision optics are completely embedded within HIL-Tech's custom clear matrix, LEDline® is extremely tough; impact resistant; submersible, and thus completely waterproof.

(Please see our website for the video demonstration of how tough and impact-resistant LEDline® is when placed on top of the road surface and then repeatedly rolled over by a 10-ton roller.

The Unusual Road Test: In September 2021 LEDline® was placed on the surface of a nearby road being redone, and a 10 Ton (20,000 lbs.) roller went over it many times. The video is at www.ledline.net or https://ledline.net/home/

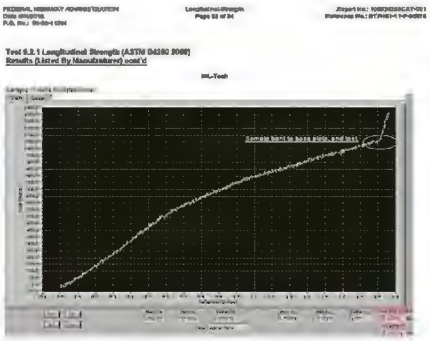
Since it is always normally mounted within a groove in the pavement, slightly below the pavement surface, this unusual test demonstrates just how tough LEDline®.

Sudden Impact Test: LEDline® is tough, please see the sudden impact hammer test video on YouTube www.youtube.com/watch?v=4h1Lnig_EPg

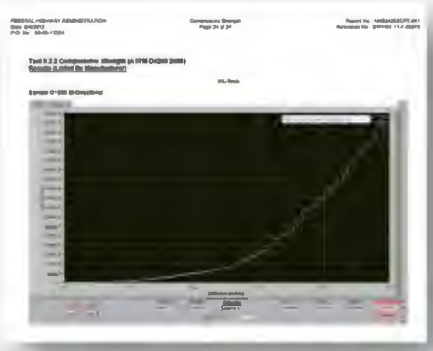
Temperature: Previous LEDline® fixtures have been tested from -55C° (-67° F.) to +65C° (+149° F.) with no effect on the fixtures.

Canadian Navy Tests: Early LEDline® successfully passed Mil Spec. test for lighting the escape chambers of submarines. It was so successful that it was then used as lighting within the pressurization test chamber**. There, the LEDline® cycled over +5000 times at seawater depths of 300m (1000 ft.).** For verification, please contact Mr. Stephen.Mauchan@nete.dnd.ca.

FHWA Tests: FHWA In 2012 tests on an older style 6 x LED LEDline® lamp **Without Its Mounting Plate**. LEDline® lamp was mounted across two small steel supports and 89,000 lbs. weight was applied to its unsupported middle. The lamp was bent some 76mm (3") out of true. However, even with so much pressure and bending the lamp some 76mm (3") out of true, the lamp did not fail; its lens did not even crack; and the LEDline® continued to function normally. This demonstrates LEDline®'s toughness.



When surface mounted, without its Mounting Plate, the LEDline® withstood the maximum loading of the machine of 89,000 lbs. = 40.37 tonnes or 44.5 tons, on its 40mm (1.6") wide surface.



Longevity of LEDline®: The oldest installation of the modern style of LEDline® (with 12 x LEDs and a Mounting Plate), is at Vancouver International's de-icing pads. Installed in fall 2009, they've never been turned off and are still operational today. As of February 2026, the system (still operational), has been switched on and operating 24/07 for some +16 years and counting. (For Vancouver references, please contact HIL-Tech Ltd.)

Vancouver International De-Icing Pads: A Challenging Test Site for Any In-Pavement Visual Aids:

- ✓ **Reflecting on both their longevity and reliability; Since their installation in the fall of 2009, the LEDline® units in Vancouver have never been turned off and, as of January 2026, are still operational +16 years and counting).**

- ✓ The airport's northern location and proximity to the Pacific Coast create frequent freeze/thaw cycles in winter, presenting significant challenges for pavement and lighting installations.

- ✓ Vancouver International is located on the Fraser River Delta, therefore, the groundwater is close to the surface which also creates pavement movement, yet in 2026 pictures above, the LEDline® installation still looks new.

- ✓ Nearby tectonic activity results in frequent earth tremors, (they average about 500 per year), further testing infrastructure resilience.

- ✓ Intensive winter maintenance programs expose installations to the mechanical stress from snowplows and brushes and being installed in the de-icing areas to chemical sprays (e.g., Glycol).

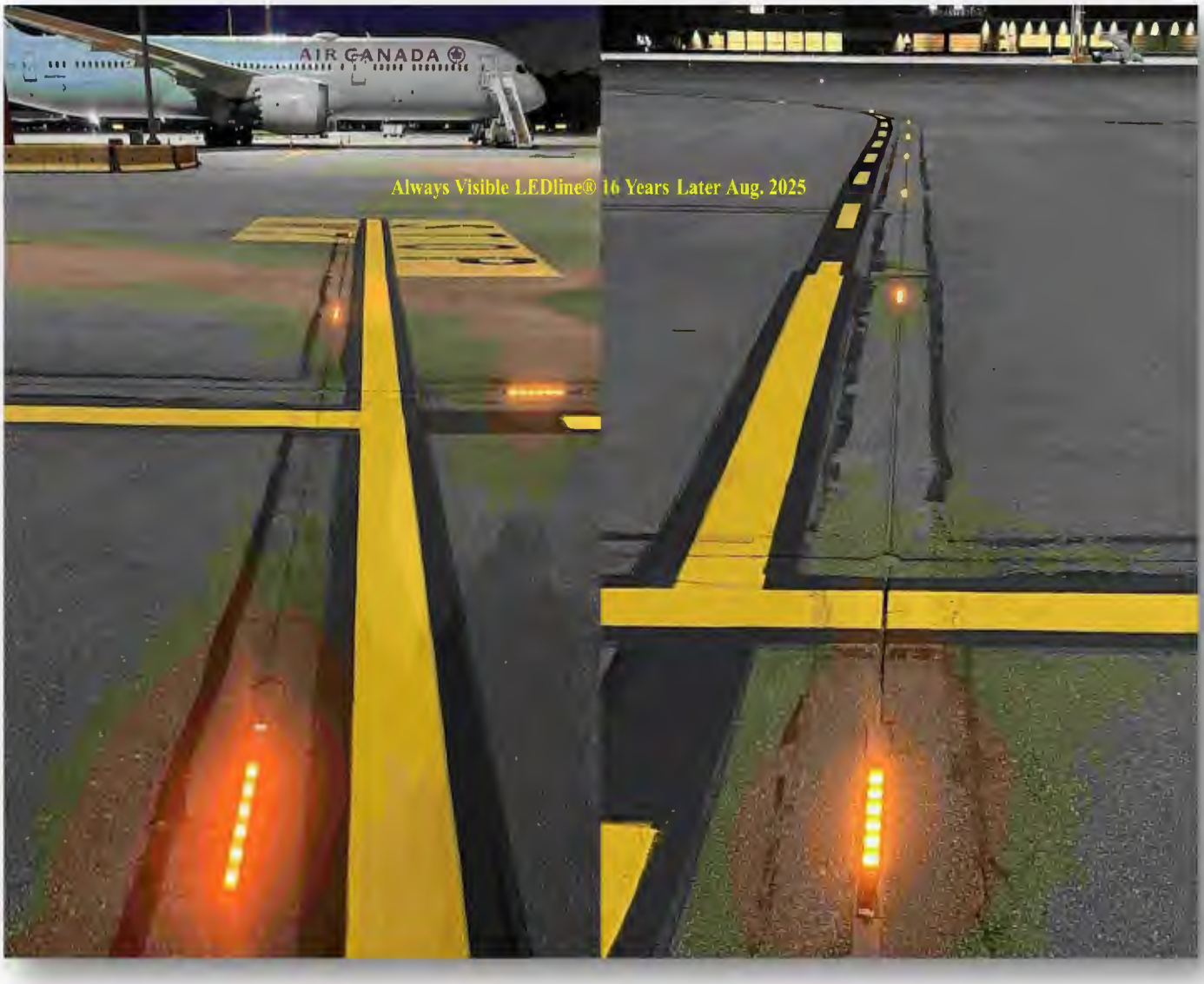
- ✓ Recent summer seasons have brought extreme heat, posing additional challenges to lamps that are never turned off, yet the LEDline® was unaffected.

- ✓ As a central cargo hub to and from Asia, in winter, Vancouver's de-icing pads and LEDline® experience heavy aircraft traffic—including fully loaded Antonov's, A-380s and Boeing 747s—which underscores the necessity of resilient visual aids able to take the parked or rolling weight of the heaviest aircraft.

Vancouver references are available. (A 2012 video of the LEDline® at Vancouver's de-icing pad is available on our website **https://ledline.net/airfield-3/).** Despite all of the above, the LEDline® there is still working and is still in use, and the installation still looks great with no cracking or spalling of any of the concrete slabs or asphalt breaking up.

Vancouver International 's De-icing Pads. Picture 2012 by Stewart McIntosh of Vancouver International.

Vancouver International De-Icing Pads August 2025 some 16 x Years Later. They still look like new.



LEDline® Is Tough, Submersible to Depth, Chemical Resistant, and Resistant to Weather: LEDline® is very tough, please see the sudden impact hammer test video on YouTube www.youtube.com/watch?v=4h1Lnig_EPg

Base Materials Properties: Custom proprietary crystal-clear matrix specifications not provided.

Complete LEDline® Assembly: The above specifications were developed by HIL-Tech based on successful tests performed on the previous generations of encapsulated LEDline® products. Because the tests are so extreme, such tests would not normally be repeated unless today's product was being used for other types of extreme environments.

Low Power, Energy Efficient: LEDline® lamp units are RoHS certified and are usually induction powered (non-contact, no hard wiring of the connections), and are low powered. Depending on the LED's color, the 12 x LED system uses only some 20VAC at 700mA, whilst the 6 x LED system depending on colour, uses around 20VAC at 350mA.

Power Supplies: LEDline® units can be powered by any type of power from; airfield series circuit; Mains power anything from 90 – 220VAC; VDC power; or renewable energy like wind and/or solar power with batteries.

HIL-Tech's Induction Master Controllers (MC) are The Preferred Power Supply for LEDline®.

Below is a modern Master Controller with six (6) independent Power Modules, each able to independently power induction circuits of some 1,400m (4,593 ft.), with each circuit powering some thirty (25 - 30) LEDline® lamp units.

(Note: All HIL-Tech power supplies are individually CSA inspected and certified to conform to electrical standards for US (UL), Canada (CSA), and/or European (CE) certifications).

The Master Controller Power Modules contain custom pulse width Power Modules that take any power from 90VAC to 220VAC and turns it into the correct powered series circuit voltage suitable for LEDline® units.

There are VDC and other types of power supplies which vary with application. (Please contact HIL-Tech Ltd. for details).

Induction Power Supply, with Induction Non- Contact Power Connectors:

Induction-powered and connected lamps are required for all in-pavement applications where vehicles are driving over the lamps. The induction system is by far the most robust electrical connector since it functions regardless of any vehicle vibration, water, or moisture. In addition, since there is no hard wiring or connecting required, it allows the direct burial wire, bringing power to the lamps to remain pristine and uncut. Therefore, to prevent corrosion, as much as possible, it is recommended not to cut or splice the Direct Burial Wire, so that as much as possible, it continues to have all its factory cladding intact.

Each LEDline® lamp comes with the IP69K (male part) of the connector. It therefore requires one completely sealed induction power connector unit with its attached IP69K (female part) connector system to connect to the Direct Burial wire.

DC Power Supply: HIL-Tech's DC power supplies are suitable for surface mounting and other applications. Hard-wired DC powered LEDline® connections must use HIL-Tech's Power Equalizer to maintain uniform brightness. Additionally, hard-wired lamps can be controlled individually via a DMX signal.

Renewable Energy Power Supply: LEDline® can be powered via solar panels; wind power and batteries. Battery size is dependent on the installation size. Where the sun and/or wind are not dependable, it is recommended that a propane backup generator is included to top up the batteries when the solar or wind fails.

LEDline® IP69K Connectors (electrical): LEDline® comes with the top-of-the-line IP69K electrical induction non-contact connector with one (1) sealed (male) locking IP69K quick disconnect. The IP69K has a screw-together locking nickel-coated brass connector and is the highest possible IP rating connector available. (**Note:** There are stronger deep sea pressure connectors available, if these are required, please contact HIL-Tech for details).

IP69K Connector: The highest type of IP electrical connector is submersible. Below are its test results.

Copyright Ifm: M8 Male and Female Pico DC Cord sets and Field Wirable Connectors EVC141 (Rated IP69K)

Operating voltage:	Without LED: 50 V AC / 60 V DC
Current rating:	3A
Protection rating:	**IP69K = Protected against ingress of dust and high temperature, and close-range high pressure, temperature spray downs**.
IP69 Test:	(On a rotating turntable, with a speed of 5 ±1 revolutions per minute, the test requires a spray 4 "- 6" (101mm-152mm) from the product of 4 gallons/16 liters per minute with water pressure of between 1160-1450 psi, at a temperature of 176°F/80°C. The heat and spray must not cause damage. The IP69K rating is the highest protection available unless custom deep-sea connectors are required. **Please contact HIL-Tech for technical specs. on any required deep-sea connectors**).
Tightening torque:	0.3 0.5 Nm
Ambient temperature:	-25 90 °C
Flex rating:	> 5 million cycles
Material body:	TPU housing, Viton O-ring
Material:	Nickel-plated brass
Coupling Nut:	Nickel-plated brass
Cable:	PUR, halogen-free, 24 AWG conductors, Ø 3.7 mm
Approvals:	cURus and RoHS standards

Technical Specs – Field Wirable Connectors

Operating voltage:	60 V AC / 75 V DC
Protection rating:	IP69
Ambient temperature:	-25...90 °C
Material body:	Nickel-plated brass (L33600, L33601, E18216, E18218) PA (L33602, L33603, E18217, E18219)
Material Coupling Nut:	Nickel-plated brass.

Cord Set Features:

- Cord sets feature a "Lock-in-Place" coupling nut that resists high levels of shock and vibration.
- Cord sets offer high-flex PUR-jacketed cable rated for over 5 million flex cycles.
- A special insert design includes a mechanical end stop preventing damage to Viton O-ring from over-tightening.
- Cord sets are designed and tested to resist harsh conditions in industrial automation.

(Please Note: For those requiring connectors for submersible deep-sea applications, there are other custom deep-sea connectors available. Please contact HIL-Tech for details).

Direct Burial Wire:
For the induction wire, a direct burial wire type should be used #8 (USA) RWU gauge wire (= #35 metric wire gauge MAX O.D. of insulation 7.9mm (0.31")) suitable for direct burial.

Installation should be according to local codes, and the wire should not be cut or spliced. In applications, measure off the complete wire run distance, (not forgetting to add in the amount to reach the power supply) and then double this distance to have sufficient wire to create a complete unbroken loop over the entire distance. (i.e., if the distance is 200m. (656ft.), and another 10m (32ft.) is needed to cross the road to the power supply, then the wire loop distance needed would be 420m. (1,377ft.)).

Depending on the number of LEDline® units required to be lit and the impedance of a circuit, a single Power Module should be able to power some 25 - 30 x LEDline® units, over a 700m (2,296ft.) circuit. The greater the circuit distance and impedance, the fewer the number of LEDline® units can be lit. (Contact HIL-Tech for guidance as HIL-Tech has power supply boosters so can boost the circuit to potentially carry more).

Note:

- **HIGHLY RECOMMENDED**: To minimize any power line corrosion, the direct burial power line circuit wire should be continuous, without breaks, joints, or connections of any kind. Each wire run must start/go from its Power Module power supply, out to the end of that wire run and then double back and end back at the same particular Power Module.

- **The power line wire loop circuit must always be closely tied together with plastic ties or tape every 30cm (12") to minimize any impedance or EMI emissions**.

Intellectual Property of HIL-Tech Ltd.:
HIL-Tech Ltd. is a leader in developing linear LED-based illuminated in-pavement, barrier, and sign markings for; airports; roadways; the marine; mining; military, and other markets. Responding to the demands of the transportation industry, HIL-Tech Ltd. has developed a design and process to encapsulate the brighter and more powerful daylight-visible LEDs into a solid, clear, submersible, and extremely tough matrix.

All LEDline® products are the intellectual property of HIL-Tech. LEDline® has Patents and pending patents in respect of this innovative addition to the family of LED-based linear and other guidance lighting systems. LEDline® is a registered trademark of HIL-Tech Ltd.

Product Status: Based on the Company's experience LEDline® should meet the technical specifications provided herein.

Specifications May Change: All information herein indicates preliminary specifications for LEDline® products and accessories. Any of this information may be changed at any time without notice.

Any specifications of other manufacturers' materials of their component that are provided, any of this information may be changed at any time without notice.

HIL-Tech's LEDline® Limited Warranty: ***Only applies if the product and any related HIL-Tech Ltd. services have been paid for in full.*** **Provided there are no outstanding accounts payable to HIL-Tech, HIL-Tech provide and recognize the HIL-Tech Ltd. LEDline® Limited Warranty.**

Limited Warranty of one (1) year on parts only from the date of the shipment from the HIL-Tech factory. (Please contact HIL-Tech Ltd. for full details):

Possible Additional Years of Limited Warranty: HIL-Tech is pleased to offer additional years of

Limited Warranty, up to another three (3) years Limited Warranty. Please contact HIL-Tech for prices.

Additional Years of Limited Warranty are available for purchase at the time of order. An extended additional Limited Warranty is available for purchase of;

- an added one (1) year;
- two (2) years; or
- three (3) years**.**

Any Additional Limited Warranty above and beyond HIL-Tech's standard one (1) year Limited Warranty must be purchased at the time of order. (Please contact HIL-Tech Ltd. for details).

For Any Limited Warranty Claim: For Any Limited Warranty Claim the product must be returned to HIL-Tech for evaluation. Therefore, all LEDline® Returns Must Have A Return Goods Authorization (RGA). All returns must have and be accompanied by a pre-authorized return goods authorization (RGA) number obtained from HIL-Tech Ltd. before such return or the returned goods will not be accepted. Credit for any goods returned AND accepted under the Limited Warranty may be granted once the goods have been inspected.

Returned product will be tested. (**Note:** LEDline® light units that have had their wires pulled out or the wires have been broken, but, when tested, the LEDs still fully light, **will NOT be accepted as a return or credited under the HIL-Tech Limited Warranty as the product connections were broken at site)**.

Under no circumstances will HIL-Tech Ltd. or its successors be responsible for any collateral, consequential, or installation damages. For a complete copy of the Limited Warranty details, please contact HIL-Tech Ltd.

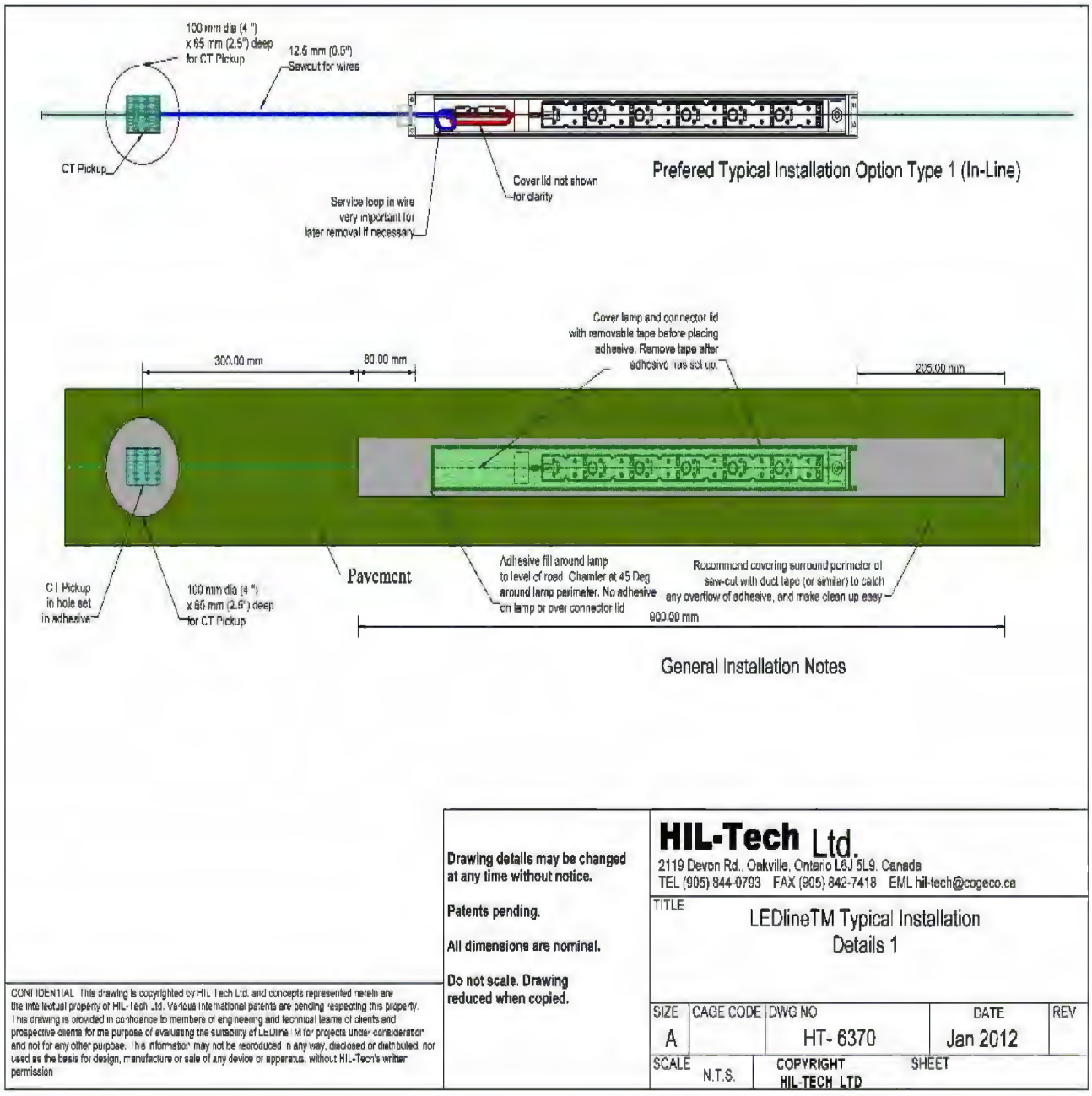
As above, the restrictions and conditions apply on any issued HIL-Tech Ltd. extended Limited Warranty.

No Liability:

Notwithstanding that HIL-Tech has, to the best of its knowledge and belief, provided accurate information herein, HIL-Tech assumes no responsibility for the accuracy or completeness of representations made, nor the accuracy or completeness of representations made by component manufacturers, or for any expressed or implied recommendations concerning LEDline® products. Before utilizing any LEDline® systems, products, accessories, or ancillary equipment, all prospective users should evaluate the suitability of said systems, products, accessories, and ancillary equipment for their own intended uses or purposes and should draw their own conclusions. **The user assumes all risks and liabilities in connection with such use or uses.**

Appendix 1: Installation Details.

Drawing Not to Scale:

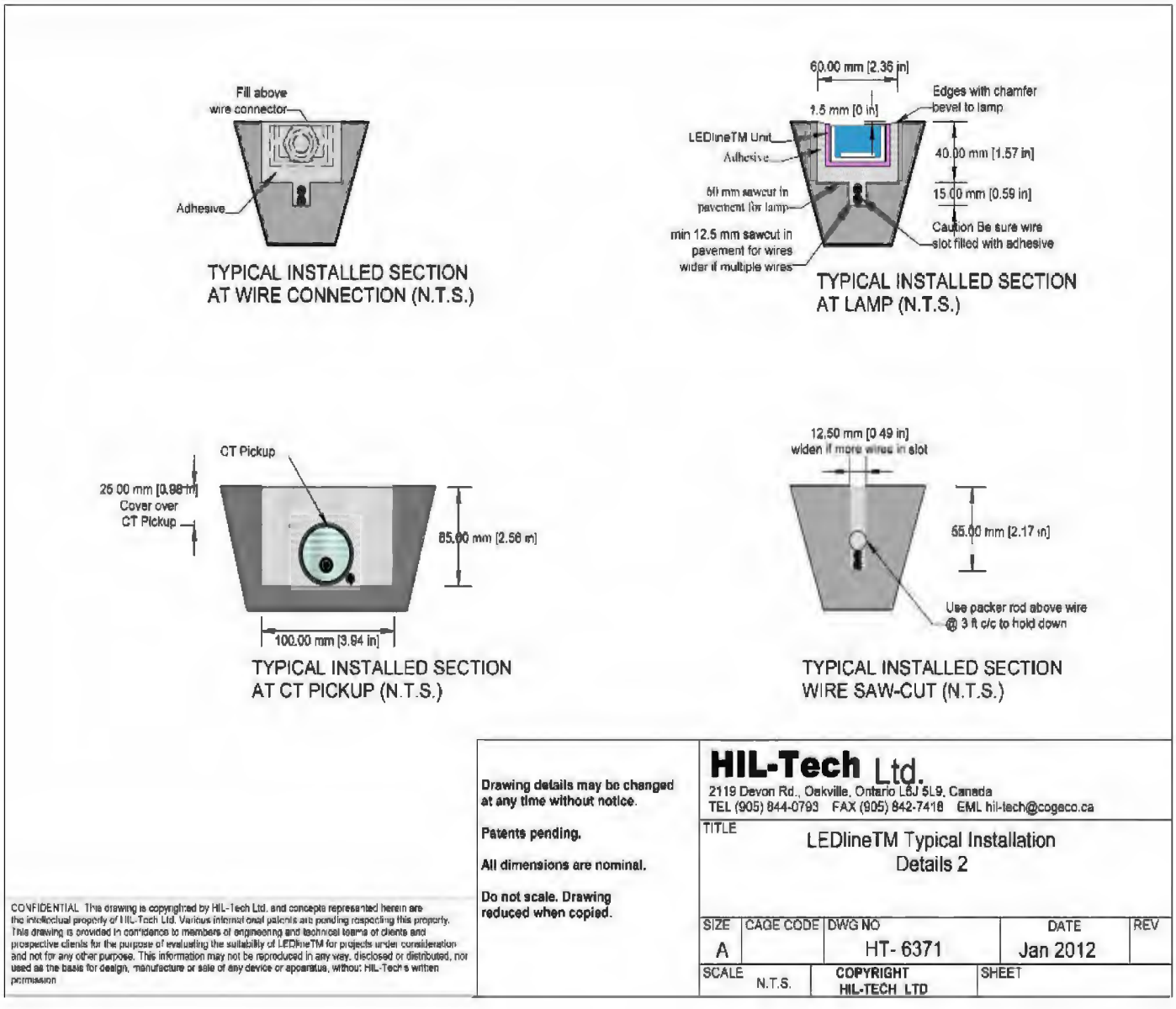


Drawing Not to Scale:

Typical Schematic for Sawcut Depths for The Lamps, Induction Power Distribution Cables, and Induction Quick Disconnect IP69K Connectors.

(**Please Note:** The installation of the induction power cables cannot be separated from the lamps, please see the more comprehensive details in our Installation Guidelines).

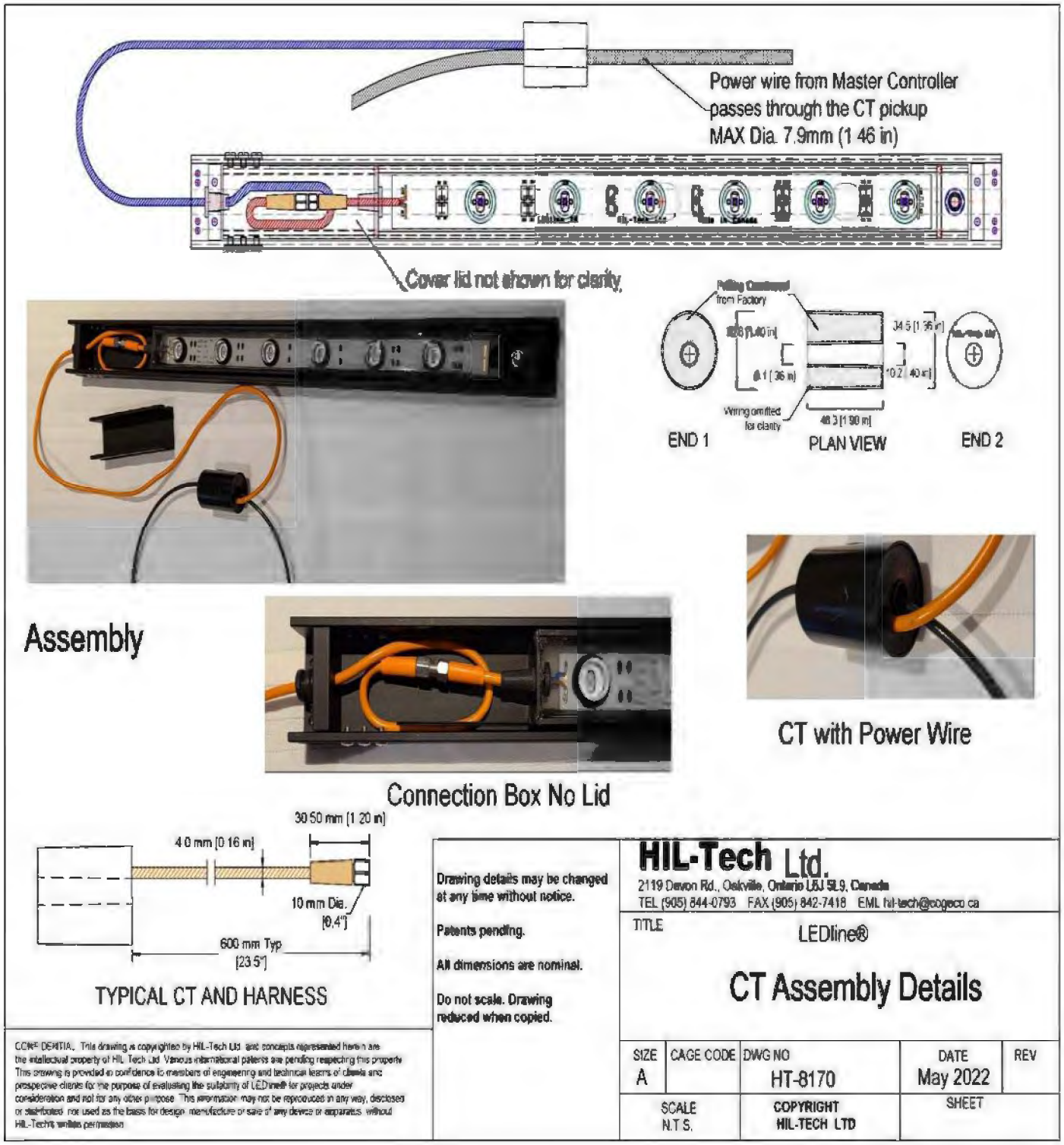
Drawing Not to Scale:



Drawing Not to Scale:

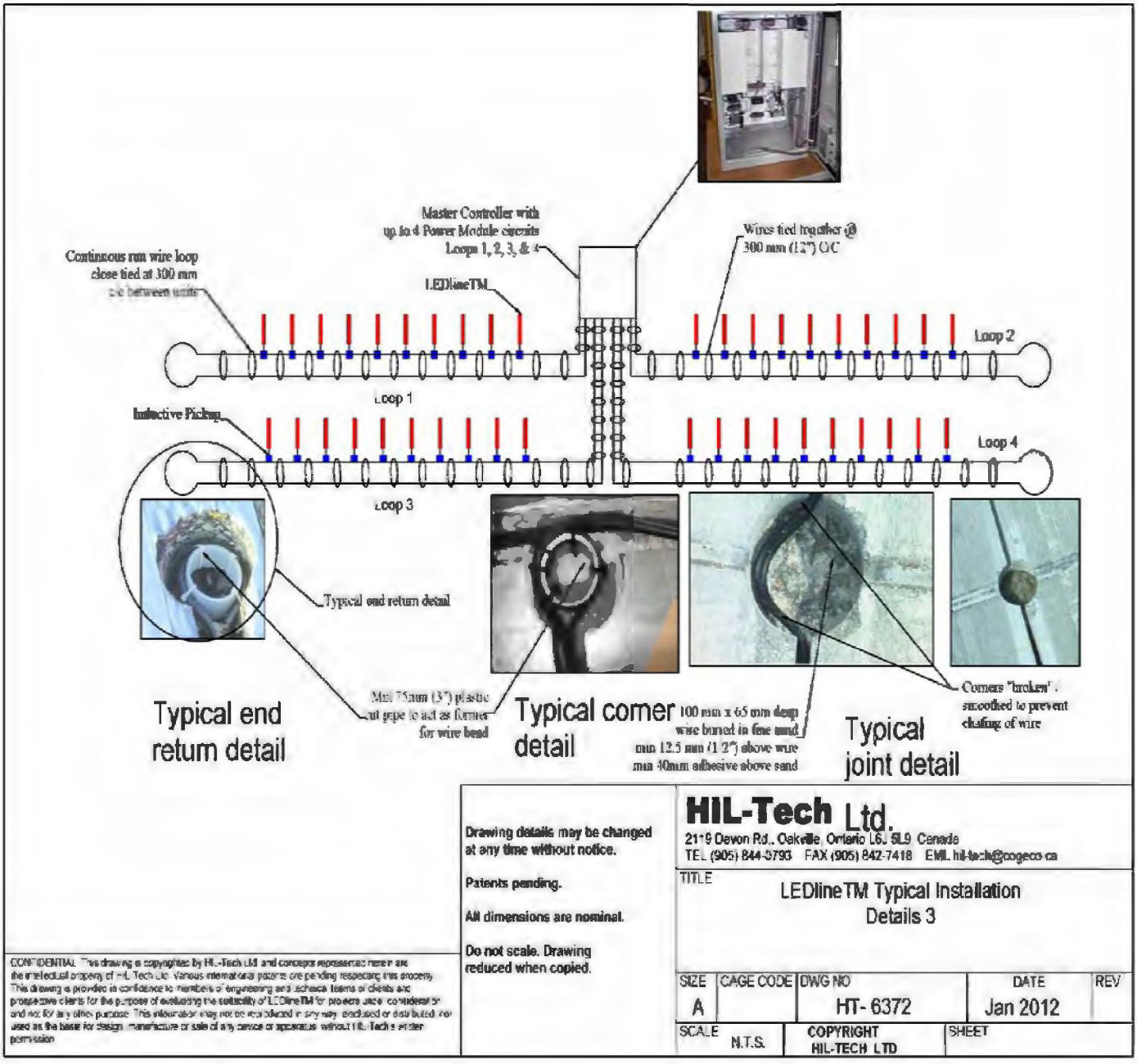
Schematic of Typical Induction Power Pickup:

Drawing Not to Scale:



Drawing Not to Scale:

Schematic of Typical Induction Circuit:



Appendix 2: LEDline® PART NUMBERS

Part Number Format for Ordering

The part numbers for LEDlineDV™ (semi-directional) and LEDlineHB™ (omni-directional) are detailed in the Attachment Optical specifications which include:

Colour — Representing available LED colour choices {R - red, A – airport yellow / amber, G - green, B - blue, W - white}

Optics — The six (6) LED LEDlineHB™ system, **is an omni-directional light system with embedded optics**, whilst the six (6) LED LEDlineDV™ styled system includes **an embedded semi-directional optical system,** needed to focus much of the light at low angles towards the viewer.

— The LEDlineSunHB™ system is omni-directional but has twelve (12) embedded LEDs with its precision optics, whilst the LEDlineSunDV™ is semi-directional and has twelve (12) embedded LEDs with its precision semi-directional embedded optics.

All Parts are LL-** - *****-xx for LEDline® generic product.**

Lamps:

LL – DV00 – 0003W-12 = LEDlineDV™ with directional optics, with an induction connector in colour white.

1st Pair = Choice of Optics

DV	=	With directional optics
HB	=	Omnidirectional or No optics

2nd Pair = is for the sunlight visible variant S with the number of LEDs, 6 x LEDs, or 12 x LEDs

S0	=	Sunlight visible

LL – HBS12 – ICW0 = LEDlineSunHB™ (omni-directional) with 12 x LEDs optics, with an Induction Connector in the colour white.

LL – DVS12 – ICW0 = LEDlineSunDV™ (semi-directional) with 6 x LED directional optics and 6x LED (omni-directional), with an Induction Connector in the colour white.

3rd Pair = **Connector Type**

IC	= With Induction Connector
00	= no Induction Connector, (with standard 3m length of wire) anything over 3m has an extra charge. (Please contact HIL-Tech for the price) Other lengths should be specified here in m.
P1	= Power equalizer (for Dc power supplies only)
P2	= Power equalizer with addressable DMX

LL – HBS12 – 06W = LEDlineSunHB™ (omni-directional) with 12 x LEDs optics, with 6m* wire in the colour white. *There is an extra charge.

4th Pair = **Colour Code.**

It is possible to have two colors specified in one 12 x LED LEDline® unit like LEDlineSunTM unit 6 x LEDs of one colour and 6 x LEDs of another. Please contact HIL-Tech for such applications.

W0	= White
Y0	= Yellow
B0	= Blue
R0	= Red
G0	= Green
IR	= Infra-Red

LL – HBS12 – 06WR = LEDlineSunHB™ (omni-directional) with 6 x white LEDs and 6 x red LEDs, with 6m* wire in the colour white. *There is an extra charge.

Power System Example: **LL-PSMC-0000**

1st Pair = PS = Power System

2nd Pair = Type of System

MC	=	Master Controller
PM	=	Power Module

3rd Pair = Power Module System Configuration

01	= Use with less than 20 LEDline® Units
02	= Use with 20 or more LEDline® Units

4th Pair =Spare pair of digits for future use 00 = Spare