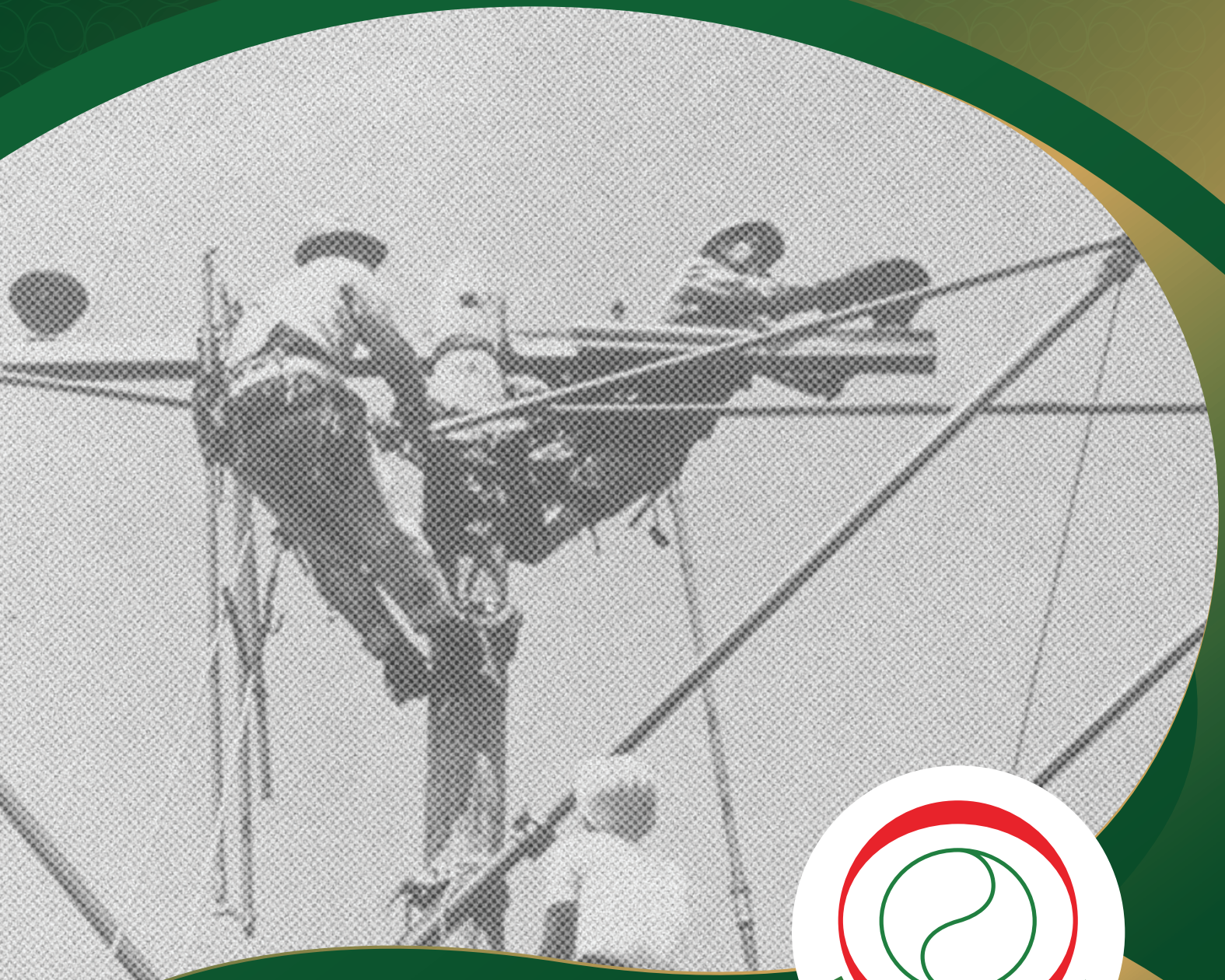


PLAN MARKET GOLD CO.,LTD.

Product Catalog & Profile

Contact us

Plan Market Gold Co., Ltd.
194 Ramkhamhaeng 24, Yaek 24,
Huamark, Bangkapi,
Bangkok 10240, Thailand.

Tel. (66)2-314-1341-2
Fax. (66)2-3141343
Email : planmarketgold@gmail.com
Website : www.planmarketgold.com

ABOUT US

Plan Market Gold Co., LTD. was founded in 2007. We distribute HV & MV equipment from both domestic and international. These include Surge Arrester, Connector, Hotline tools, Polymer Insulator, Substation Disconnecting Switch, Auxiliary Relay, Cable Puller, Tensioner, and so forth.

OUR EXPERTISE

Our core business is built on a foundation of exceptional after - sales support and continuous service. When you invest in our equipment, you are gaining a dedicated partner. Our team of staff and expert engineers will be there to provide ongoing support and ensure your purchase runs smoothly.

OUR PARTNERS

HUBBELL

OHIO BRASS

CHANCE
LINEMAN GRADE TOOLS™

RIPLEY®
UTILITYTOOL SERIES

TURNER
ELECTRIC

USCO
POWER SWITCHES

ANDERSON

FARGO

dIMRUS

onsite
HIGH VOLTAGE

MONITRA

CHUNGWOO SE CO LTD

Katnroni

OUR PRODUCTS

Our company, Plan Market Gold Co., Ltd, is the only official distributor for Hubbell Power System Inc., a high voltage equipment manufacturer from the United States. Customer satisfaction is guaranteed with warranties from the manufacturer when bought from us.

Hotstick

C4030293 C4031020

Grip-All Clampsticks with External Control Rod

Tested per OSHA & ASTM F711 and primarily designed for installing hot-line and grounding clamps. Handle made from Epoxiglas®pole.

Single - Piece Style

Catalog No.	Overall Length	Weight
C4030293	1 1/4" x 8' 7"	3.3 kg.

Hinged Style

Catalog No.	Extended	Folded	Weight
C4030343	1 1/4" x 16' 8"	8'4"	5.2 kg.

Telescoping Disconnect Tools

Tested per OSHA & ASTM F711. Designed to disconnect switches and replace cutout tubes, remove pole covers, prune trees, plus other overhead tasks.

Standard Duty (1 1/16"-dia. Tip)

Catalog No.	Extended Length (Tool can be locked at each length shown)	Storage Retracted Length	Base Dia.	Number Of Sections	Weight
C4031020	16 1/2 - 20 1/2 - 25 ft.	63"	2 1/16"	6	3.2 kg.

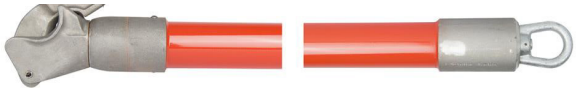
Disconnect Stick

Used on Cutouts and Disconnect Switches. Also for installing and removing open-link fuse links. Poles are made of Epoxiglas®. Tested per OSHA & ASTM F711.

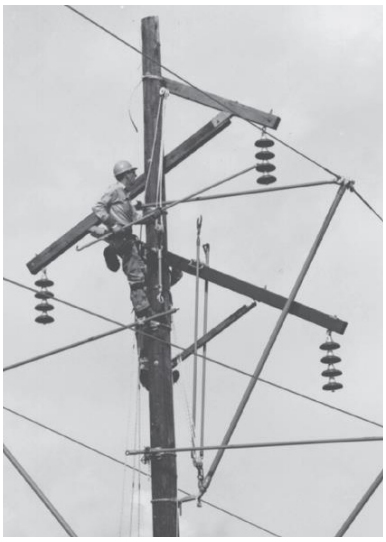
H304613

Wire Tongs

Tested per OSHA & ASTM F711. Designed for moving and holding conductors clear of the working area. Made with Epoxiglas® poles.



Catalog No.	Pole Dia.& Length	Overall Length	Wire Size		Approx. Weight
			Min.	Max.	
H46468	2” x 8’	8’ 8”	0.16”	2.25”	5.0 kg.
H464610	2” x 10’	10’ 8”	0.16”	2.25”	5.4 kg.
H464710	2 1/2” x 10’	12’ 8”	0.16”	2.25”	7.4 kg.



Trouble Shooter Kit

Includes six 4’ sections of field-proven 1-1/4” Epoxiglas® Universal Pole that snap together.

Catalog No.	Overall Length	Weight
C4031612	Complete Trouble Shooter Tool Kit	10.8 kg.

C4031612

Cutter

Ratchet Cable Cutters 7” for ACSR or Aluminum & Copper

C4031383

Tested per OSHA & ASTM F711. The roller mechanism travels smoothly along the main Epoxiglas® pole. Meet OSHA Electrical Rating subpart V-section 1926.951 (d). Insulated support pole is Chance orange 1-1/2”-diameter Epoxiglas with Plastisol butt cap

Ratchet Cable Cutter

Catalog No.	Overall Length		Weight
	Length	Head	
C4031383	8 ft.	1000 kcmil A.A. 500 kcmil Cu.	5.18 kg.

Conductor Cutters with Insulated Handles for ACSR or Aluminum & Copper

C4031423

Choice of insulated long or short handles on cutters for soft wire, and insulated long handles on cutters for ASCR. Chance orange 1½” diameter Expoxiglas® handles have black rubber cushion grips

Conductor Cutters with Insulated Handles

Catalog No.	Length		Maximum Size & Type Conductor	Weight
	Handle	Overall		
C4031421	15 1/2”	21 1/2”	600 MCM A.A./ 350 MCM Cu.	2 kg.
C4031422	28 1/2”	35”	1000 MCM A.A./ 500 MCM Cu.	2.5 kg.
C4031423	28 1/2”	33 1/2”	336.4 MCM ACSR	2.2 kg.

Hoists & Snatch Box & Rope

PSC3090451

Convertible Strap Hoists

Light-weight for easy handling, both styles are ruggedly designed for heavy-duty applications

3/4 – 1 1/2 Ton Nylon-Strap Hoists

Catalog No.	Hoist Description	Weight
PSC3090451	Rubber-Glove Style	5.4 kg.

M18954

Polypropylene Rope

Strong, lightweight and moisture-resistant. Water accumulation on surface can be removed by shaking and wiping with absorbent cloth

Catalog No.	Description	Size	Tensile Strength, Lbs.	Max. Load, Lbs.	Approx. Wt. Per 100 Feet
M18954	Stringing Line	5/8”	5,600	700	8 lb.

22301

SNATCH BLOCKS

Lightweight, cast-aluminum housing and sheave with hinged, cotter-lock yoke and either forged steel or steel meat hook. Maximum rope size is 5/8”. Maximum load capacity is 1,250 lbs. on 2230 Series only.

Catalog No.	Description with Retainer Latch	Weight
22301	1250 lb. Block with forged steel hook	0.9 kg.

Measurement Devices

Truck Boom Leakage-Current Monitor

Mounts on truck body and hardwires into truck's 12-Volt system, which eliminates battery changeout. Sounds an alarm if leakage current reaches a pre-set level.

T4070327

Sentinel Leakage-Current Monitor

Alerts utility-line workers of overcurrent conditions by sounding an alarm if leakage current reaches a pre-set level. Leakage setting adjusts from 1 to 1,000 microamperes in resolution increments of 0.1 microamp.

C4070025

Catalog No.	Description	Weight
C4070025	CHANCE Sentinel Kit	4.1 kg.
T4070327	Boom Monitor Kit (12 Volt)	6.4 kg.

Wet/Dry Hot Stick Tester

Follows procedures specified by ASTM, IEEE and OSHA. Detects leakage currents due to surface contamination, internal moisture and such internal conductive materials as carbon tracks.

C4033178

Catalog No.	Description	Weight
C4033178	115-volt model	9.0 kg.
C4033179	*230-volt model	9.0 kg.

*Power-source cord does not include plug on 230-volt model

Auto-Ranging Voltage Indicator (ARVI)

Complies with OSHA 1910.269 to Test for Absence of Nominal Voltage. Allows the operator to determine if a line is de-energized, or carrying less than normal system voltage from any source or induced voltage from an adjacent live circuit, or energized at full system voltage.

C4033374

Catalog No.	Description	Weight
PSC4032915	Distribution / Transmission ARVI - Full Range (600V to 500kV)	2.0 kg.
C4033374	Distribution ARVI - 600V to 69kV	2.5 kg.
C4033375	Transmission ARVI - 69kV to 500kV	2.5 kg.

Multi-Range Voltage Indicator (MRVI)

Visible and audible voltage indicator with range from Capacitive Test Point up to 80kV Phase-to-Phase. Equipped with bluetooth Connectivity to view MRVI display live on a mobile device.

PSC4033710

Catalog No.	Description	Weight
PSC4033710	Multi-Range Voltage Indicator and Bag	0.6 kg.
PSC4033925	Multi-Range Voltage Indicator and Hard Case	0.6 kg.

Phase Rotation Tester

To determine the correct phase-rotation relationship, the tester consists of two fiberglass poles with end fittings threaded for interchangeable probes. Meter displays up to 16 kV alone and can also read circuits through 80 kV with the thread-on Extension Resistors.

H1879

Catalog No.	Description	Weight
H1879	Phase Rotation Tester, 16 kV, with Case	10.4 kg.
H18762	Pair of Extension Resistors for through 80 kV, Length: 43”	2.7 kg.
H18764	Pair of Extension Resistors for through 48 kV, Length: 25”	1.8 kg.

Covers

26.4kV Covered-Phase-to-Covered-Phase with Grip-All Adapter

Tested to ASTM F712 Class 3, made of high-density, bright orange polyethylene.

Catalog No.	Description	Weight
C4060181GA	5' Conductor Cover with Grip-All Adapter	1.8 kg.

C4060181GA

46kV Covered-Phase-to-Covered-Phase

Made of high-dielectric polyethylene. Wax-like surface provides natural self-cleaning action and resists effects of greases and other contaminants. Tested to ASTM F712.

Catalog No.	Description	Capacity	Overall Length	Weight
M4931	Conductor Cover	Conductors through 1 ¾" diameter	5'	4.2 kg
C4060046	*Insulator Cover Set	Insulators through 10 ½" diameter	22" to 34"	5.0 kg.

*Consists of two pieces.

C4060046

M4931

Rubber Insulating Blankets

Meet ASTM Standard Specification D1048. Type II (ozone-resistant). Class 4 blankets maximum use voltage 36kV and proof tested at 40kV AC. Class 2 blankets maximum use voltage 17kV and proof tested at 20kV AC

Solid Blankets

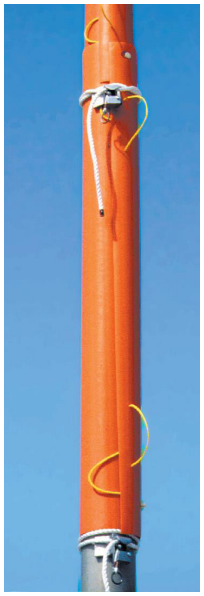
Catalog No.	Description	Weight
C4060346	Class 4 36” x 36”, 6 eyelets	3.7 kg.

C4060346

Pole Covers, 36.6kV Covered-Phase-to-Covered-Phase

Tested to ASTM F712 Class 4. High-dielectric linear polyethylene covers will not flash flame. Pole covers are ribbed to reduce cover contact with the pole, thus minimizing creosote contamination

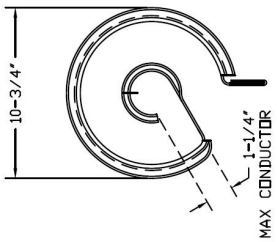
C4060000



Catalog No.	Description	Weight
C4060000	72” long, 12” Diameter Pole Covers	7.3 kg.

Spiral Conductor Covers, 72.5kV Covered-Phase-to-Covered-Phase

Provides protection for accidental brush contact during live line maintenance. Tested per ASTM F712, Class 6. Made from tough, durable ABS Plastic.



PSC4060737GA

Catalog No.	Description	Weight
PSC4060737GA	Class 6 72.5kV Spiral Conductor Cover	5 kg.

Grounding

Overhead Distribution Grounding Sets with Pressure-Type Terminals

These complete sets of ground clamps, cable and accessories. Can be used on conductors ranging from #8 to 1033 kcmil ACSR.

Catalog No.	Description	Weight
T6000641	#2 Grounding Cable Set	20 kg.
T6003094	1/0 Grounding Cable Set	26 kg.
T6003095	2/0 Grounding Cable Set	27 kg.
T6003096	4/0 Grounding Cable Set	35 kg.

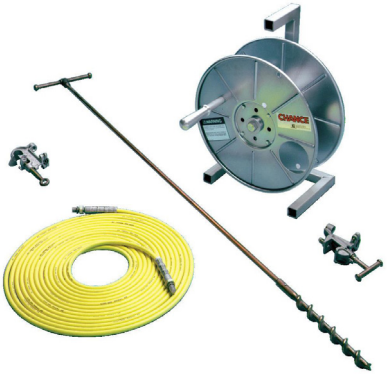
C6002276

G3626

T6001549

G3370

Truck Grounding Set



T6001971

Drains off capacitance or static charges from winch trucks and aerial devices. The set includes: Screw Ground Rod, Flat Face Ground Clamp, C-Type Ground Clamp, Grounding Cable and Ferrules, Storage Reel.

Catalog No.	Description	Weight
T6001971	Truck Grounding Set	16 kg.

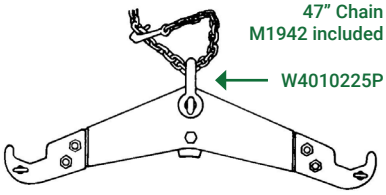
Strain Pole

Heavy Duty Two-Pole Strain Carriers (15,000 lb.)

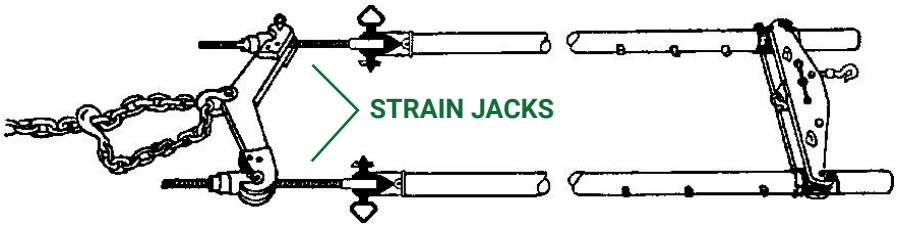
Tested per OSHA & ASTM F711. Relieve strain from an insulator string to permit removal from energized lines.

Catalog No.	Nominal Pole Length	Distance Between Yokes		Weight, each assembly
		Min.	Max.	
C4012178	14 ft.	146”	180”	43.65 kg.
C4012179	18 ft.	191”	225”	47.25 kg.

C4011721



Includes steel loading chain and attachment hardware.



E4011998, V4010157 & V4010158

M19483

H47851

Two-Pole Strain Carrier Accessories

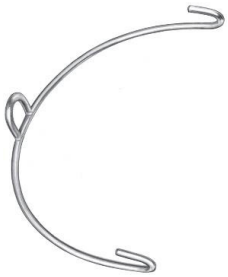
Yokes are fabricated of high strength (3/4"- and 1"-thick) aluminum plate. Maximum load ratings are 15,000 lbs. per insulator string.

Catalog No.	Description	Weight
C4011720	Conductor End Yoke Assembly	11.3 kg
C4011721	Structure End Yoke Assembly	9.0 kg

Insulator Cradle

EHV Trough-Design Insulator Cradle

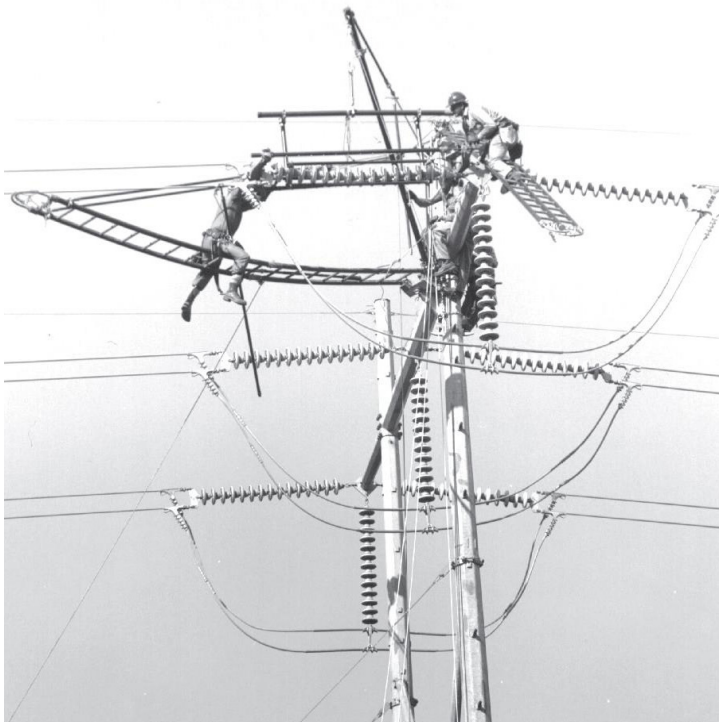
Tested per OSHA & ASTM F711. For making insulator changes on lines energized up to and including 500 kV.



070184

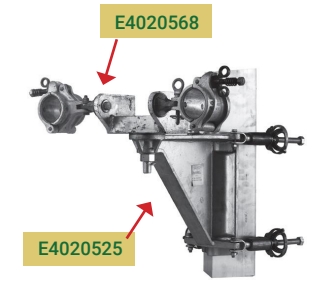
068922

H19509 or C4010015

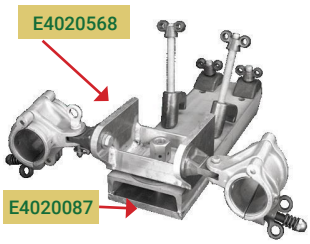


Catalog No.	Description	Max. 10” Insulator Capacity	Weight
H19509	9’ Insulator Cradle	19	10.45 kg.
C4010015	11’4” Insulator Cradle	25	12.27 kg.
H195090	Insulator Cradle Carrier	------	11 kg.

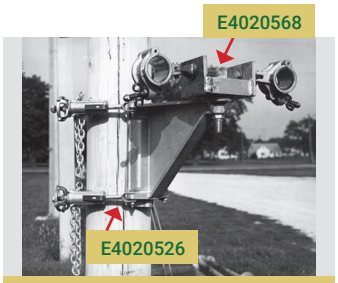
Hook Ladder



Ladder Support Assembly
for Vertical Tower Member

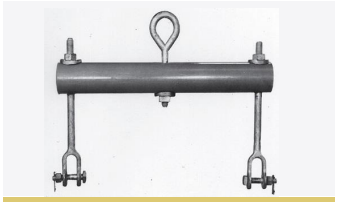


Ladder Support Assembly
for Horizontal Tower Member



Vertical Ladder Support
Attachment for Wood Poles

E4020092
Double Clamp 2 1/2" and 1 1/2"Diameter



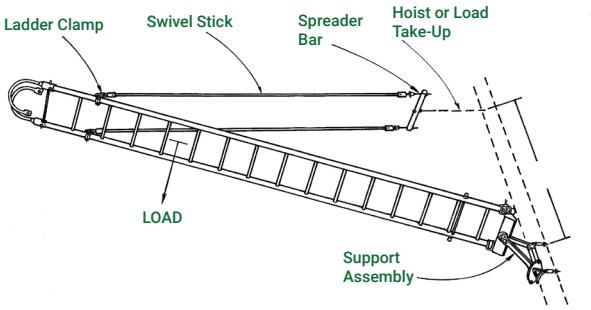
E4020099
Spreader Bar

E4020138P
Ladder Clamp 2-1/2"

Epoxiglas® Spliced Ladders

Meets ASTM F711 and IEC 61478 - Category 2. Heavy-duty Chance Epoxiglas Ladders, manufactured in short, easy-to-transport lengths, are joined with Chance Rigid Ladder Splice to form an unshakable, rigid splice.

Catalog No.	Top Section Length	Weight
C4020404	14'	23.4 kg.
C4020407	16'	25.2 kg.



Ladder Support Attachments

Converts Chance Epoxiglas® ladder to a platform for live-line maintenance. Sets are designed for steel or wood structures, vertical or horizontal.

Epoxiglas® Spliced Ladders

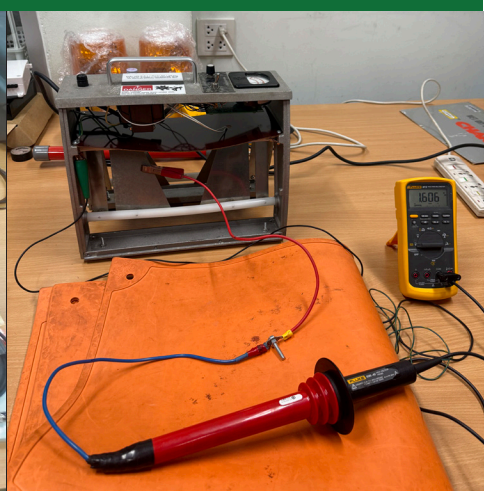
Calibration Center

Calibration Center for *CHANCE* tools

Plan Market Gold is the only authorized distributor of Chance Lineman Tools from Hubbell Power Systems, Inc. in Bangkok, Thailand. With over 10 years of experience in the field, we are now officially trusted to become a calibration center for Hubbell-related measurement instruments.

Accepted *CHANCE* Instruments

- Voltage Indicators
- Phasing Tester
- Leakage Monitor
- Super Tester
- Hotstick Tester
- Etc.



Standard Cutout

Standard Polymer Cutout

27 kV, 150 kV BIL, Standard Type C Polymer Cutout with a 100A, 12kAIC fuseholder application on system voltages up to 36kV and 170kV BIL. Fully Compliant with ANSI/IEEE C37.41 & C37.42 – 2016. ESP (Enhanced Silicone Polymer) Insulating Material.

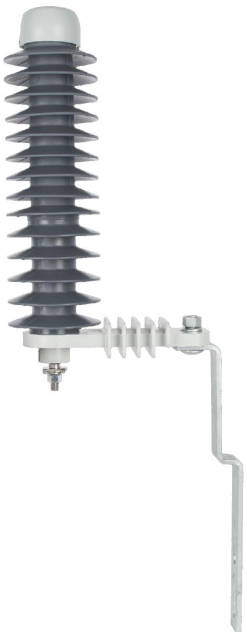
CP710313PB

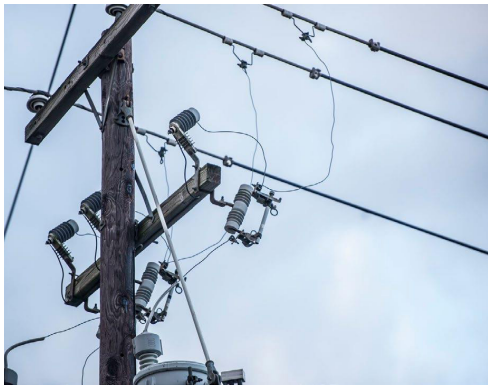
Polymer and porcelain insulators and arresters protecting transmission, substation, and distribution systems for over 130 years.

Since 1888 Ohio Brass has produced insulators and arresters for suspension, station, and line posts, as well as polymer insulator and arrester combinations for lightning protection. Today, we manufacture products in Wadsworth, Ohio and Aiken, South Carolina.

Distribution Arrestors

Hubbell offers IEEE and IEC compliant distribution arrestor products. The application may dictate the use of a different design to handle excessive lighting duty, high TOV or offer superior equipment protection. Distribution arresters are commonly applied on system voltages from 3 to 46 kV.





Selection Guide

Product Line	IEEE Class	IEC Class	MVOC (kV rms)	Duty Cycle Rating (kV rms)	Housing Material	Thermal Charge Rating, Qth (C)	Repetitive Charge Transfer Rating, Qrs (C)	Rated Short Circuit Current (kA rms)
PDV-65 Optima	Normal Duty	Distribution Medium	2.55 to 29	3 to 36	ESP™ Polymer	0.7	0.2	16
PDV-100 Optima	Heavy Duty	Distribution High	2.55 to 34	3 to 42	ESP™ Polymer	1.1	0.4	20
PVR Optima	Heavy Duty Riser	——	2.55 to 29	3 to 36	ESP™ Polymer	——	0.5	20
PVI-LP	Intermediate	Station Low	2.55 to 57	3 to 72	ESP™ Polymer	——	2.0	40

Station Arrestors

Station Arrestors

The following IEEE and IEC summary tables provide key characteristic on Hubbell station arrester designs. Claimable values are made according to IEEE C62.11 and IEC 60099-4.

IEEE Arrester Designs

Product Line	IEEE Class	Duty Cycle Rating (kV rms)	MVOC (kV rms)	Housing Material	Switching Impulse Energy Rating, Wth (kJ/kV MCOV)	Single Impulse Charge Transfer Rating, Qrs(C)	Rated Short Circuit Current (kA rms)	Maximum Design Cantilever load (MDCL) -in-lb (kNm)	Maximum Short-term Cantilever Load-in-lb (kNm)
EVP	Station	3 - 228	2.55 - 180	ESP™ Polymer	9 (E)	3.2	63	10,000 (1.13)	20,000 (2.26)
SVN	Station	12 - 564	10.2 - 448	Silicone Polymer	11 (F)	5.2	63	35,000 (4.0)	70,000 (7.91)
MVN	Station	12 - 444	10.2 - 353	Porcelain	11 (F)	5.2	63	60,000 (6.78)	150,000 (17)

IEC Arrester Designs

Product Line	IEC Class	Ur (kV rms)	Uc (kV rms)	Housing Material	Thermal Energy Rating, Wth (kJ/kV Ur)	Repetitive Charge Transfer Rating, Qrs(C)	Rated Short Circuit Current (kA rms)	Specified Long-term Load (SLL)-in-lb (kNm)	Specified Short-term Load (SSL) -in-lb (kNm)	Mean Breaking Load (MBL)-in-lb (kNm)
EVP	SM	3 - 228	2.55 - 180	ESP™ Polymer	8	3.2	63	8,000 (0.9)	16,000 (1.8)	——
PH3	SM	30 - 420	24 - 336	Silicone Polymer	7	3.2	63	35,400 (4)	70,800 (8)	——
MH3	SM	30 - 420	24 - 336	Porcelain	7	3.2	63	——	150,000 (17)	273,450 (30.9)

Polymer Insulators

Suspension Quadri*Sil® (Silicone) Insulator

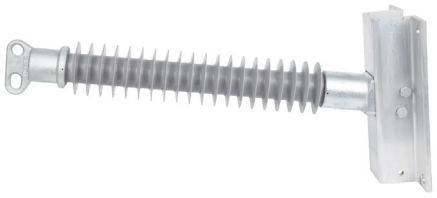
The Quadri*Sil® transmission suspension insulator embodies the latest in polymer insulator design that combines a patented revolutionary four-point sealing system together with electrical grade corrosion resistant direct draw fiberglass rod and proprietary silicone polymer to provide the highest quality, lab tested, and field proven insulator on the market.

Catalog No.	Description	Material
S025056S4090	25kip Standard leak, ANSI Straight Clevis, Tongue	Silicone Rubber
S030053H2100	30kip High Leak, Y Eye w/ring	Silicone Rubber

S025056S4090

Line Post Quadri*Sil® (Silicone)

The Quadri*Sil® transmission line post insulator embodies the latest in polymer insulator design that combines a patented revolutionary four-point sealing system together with electrical grade corrosion resistant direct draw fiberglass rod and proprietary silicone polymer to provide the highest quality, lab tested, and field proven insulator on the market with a 3.5” core rod for the highest mechanical strength



P350194S0030

Catalog No.	Description	Leak
P350194S0030	3.5” Line Post, Two Hole Blade, Steel Flat Base with 14” CL holes for 1-1/4” bolts, and 10”x15” holes for 7/8” bolts.	Standard Leak
P250111E002A	2.5” Line Post, Two Hole Blade, Aluminum Gain Base with 12” CL holes for 7/8” bolts, with 12” Corona Ring	Extra High Leak

ANDERSON FARGO

Premier manufacturer of connectors, clamps, fittings, and accessories for the distribution, substation, and transmission markets. Best-in-class fittings, clamps, connectors and accessories for distribution, transmission, substation, and communication applications.

Splice

Automatic Splice

Guy Wire for splicing applications with overhead or support guy wires. Material: Shell – High Strength Aluminum Alloy. Jaws – Plated Steel

Copper according to ANSI C119.4 Class 1A normal tension connector (60% of conductor breaking strength unless otherwise noted)

Automatic Copper

Automatic Guy Wire

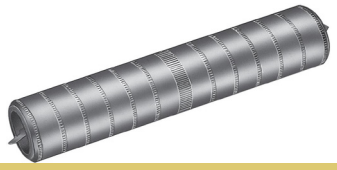
Minimum Tension Splice

ANSI C119.4, minimum tension, Class 3 connector (5% of conductor breaking strength) For aluminum to aluminum or aluminum to copper conductor splicing. Not for copper to copper connections.

Minimum Tension

Partial-Tension Splice

Shorter barrels require fewer crimps than higher strength splices for alloyed conductors. Meets industry requirements for partial tension (40% of conductor breaking strength) splicing per ANSI C119.4, Class 2



Partial Tension

Full Tension Splice

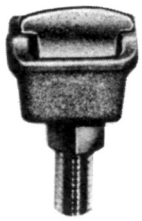
Meets industry requirements for full tension (95% of conductor breaking strength) splicing per ANSI C119.4, Class 1.

Full Tension

Bartap Connector

Bronze Bolted Tap Lug Terminal

Bronze alloy terminal for connecting a copper cable directly to a flat copper pad. Recommended for power or grounding applications.



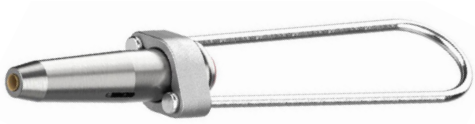
TLS89L

Catalog No.	Copper Conductor Range		Approximate Weight, kg
	Cable	Cable Diameter in Inches	
TLS89	2/0 Sol.-1000 MCM	.365-1.152 (9.27-29.26)	0.36
TLS89L	2/0 Sol.-1000 MCM	.365-1.152 (9.27-29.26)	0.38

Deadend and Terminal

Deadend Automatic Copper/Aluminum/Guywire

The flared mouth gripping unit permits easy conductor installation. The four segment jaw is precision machined and automatically adjusts to the contour of the wire.



GDE5700

Compression Deadend

Full tension deadend assembly with vertical eye for All Aluminum Conductors (AAC).

C021111NT

Compression Terminal Copper/Aluminum

Meets ANSI C119.4 Class A performance on aluminum concentric conductor . Color coded end plugs for easy die selection (see page DF-18/19)

Aluminum Compression Terminal

RIPLEY®
UTILITYTOOL SERIES

Cable Stripper

WS 50 & WS 50A Series

5-46 kV Adjustable Jacket & Insulation Stripper. Dual-handle design provides safe & easy stripping operation on all thicknesses of XLPE, plastic, polyethylene & EPR insulations

Model	Part No.	Material	Length	Weight	Replacement Blade Part
WS 50	30700	Aluminum	14 .5" (368 mm)	2 .1 lb (953 g)	30712 (Standard Reach) 30703 (Long Reach)
WS 50A	30713	Aluminum	14 .5" (368 mm)	2 .1 lb (953 g)	30712 (Standard Reach) 30703 (Long Reach)

WS 50

US14

US14 Series Ratcheting Outer Sheath Cable Slitter

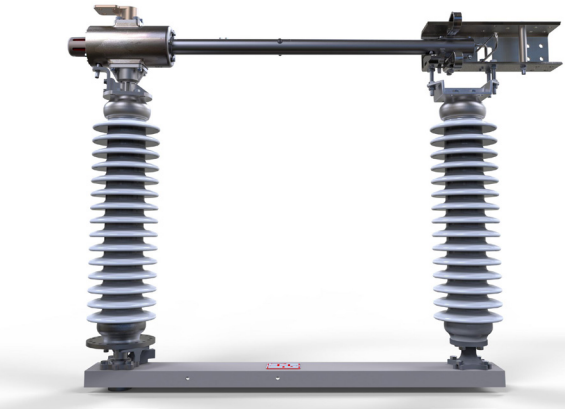
Compatible with high fiber count fiber optic cables. Micro-adjustable blade depth adjusts up to 0 .2" (5 mm) to avoid underlying cable damage

Model	Part No.	Jacket Material	Length	Weight	Replacement Blade Part
US14 Series	US14-7000	PE, PVC, Rubber	6" (152 mm)	5 .73 oz (167 g)	US14-7500

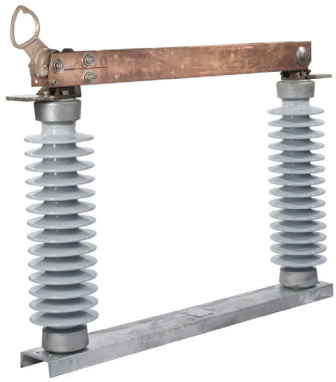
Switches

TURNER BEARTRAP™ 1-WAY SWITCHES

TU-1TS2 ALUMINUM 1-WAY SIDE BREAK SWITCHES RATINGS 38-170kV AND 600-2000A. Anti-Rollover Device—The BearTrap Switch from Turner employs a patented ramp and pin to securely position the blade in the jaw.



TURNER BEARTRAP™ SWITCHES



Hookstick Operated Switch

USCO Hookstick Operated Switch, Copper

The HH is an outdoor, hookstick operated, air disconnect switch constructed primarily of copper and bronze.

CHUNGWOO SE CO LTD

CHUNGWOO SE has been manufacturing only stringing equipment for overhead conductors, underground cables and OPGW lines since the company was established. We are trying to make the most advanced products, the fastest delivery and competitive price for our clients world wide.

Engine Puller (Jeep Puller)

This JEEP PULLER is used for pulling, assembling and tensioning of overhead conductor and OPGW by self driving when stringing works of overhead conductor and OPGW, and highly improved working efficiency that is workable without dismount of tires from the capstans.

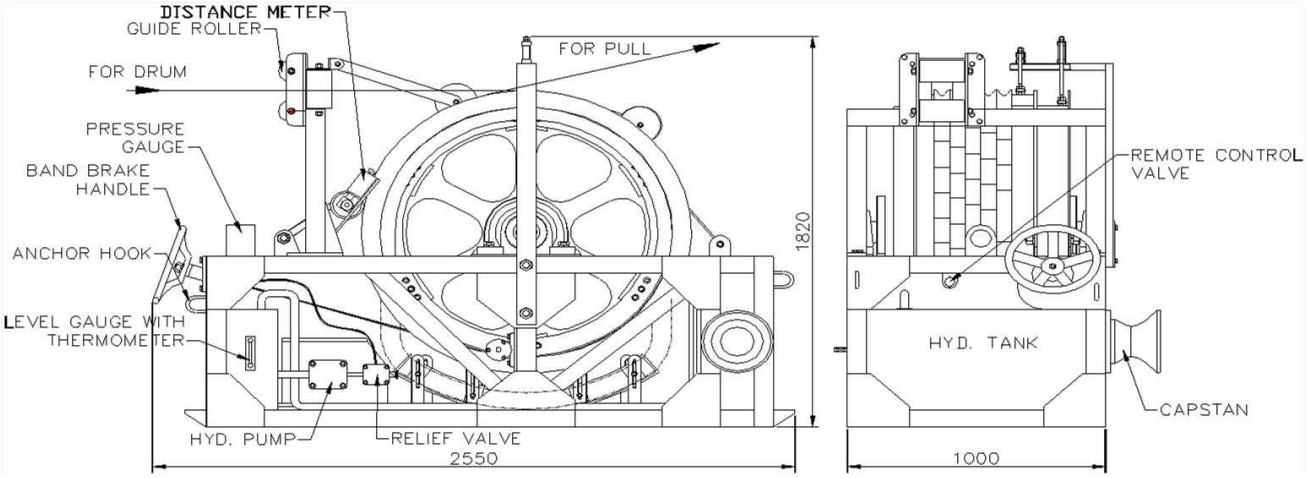
Model	CW25-4T	CW25-10T
Max. pulling force	4,000kgf x 2 capstan	10,000kgf x 2 capstan
Max. pulling speed	69 m/min	
Driving System / Speed	4 Wheel drive system / 60KPH	
Max. rope diameter	Ø16 mm	Ø25 mm
Engine	Diesel 75HP/ Water cooling	Diesel 125 HP/ Water cooling
Capstan diameter	370 mm	380 mm
Applicable reel	Ø1,150*700mm	
Dimensions (LxWxH)	3,200x1,580,1,400 mm	3,850x1,950x1,800 mm
Weight	3,100 kg	3,500 kg
Option 1	Tension, Speed, Distance meter	
Option 2	Capstan reel (Ø700 mm)	

CHUNGWOO SE CO LTD

Tensioner & Reverse Rotation Device

This tensioner is a device used in power transmission line construction to prevent damage to the conductors caused by sagging. It operates in conjunction with an engine puller to maintain a consistent tension in the transmission lines, ensuring proper resistance control.

Model	CW37	CW37-1
Max. Tension	3,500 kgf	5,000 kgf
Max. Speed	60 m/min	60 m/min
Max. Conductor dia.	ASCR 610 mm² (1, 033mcm)	ASCR 810 mm² (1,272mcm)
Bull-wheel dia. & Type	Ø1.200 mm Endless shoe Neoprene Coating	Ø1.500 mm Endless shoe Neoprene Coating
Cooling System	Air Cooled Type	Air Cooled Type
Brake	Hydraulic & Manual brake	Hydraulic & Manual brake
Dimensions (LxWxH)	2,550 x 1,000 x 1,820 mm	3,100 x 1,260 x 2,200 mm
Weight	2,300 kg	3,050 kg



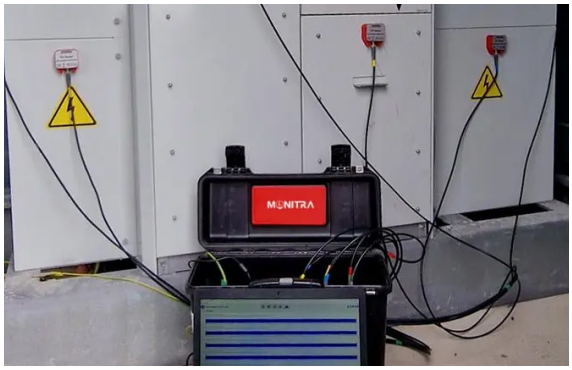
Founded in 2006 with headquarters in the UK and locations around the world, we have developed cutting edge high voltage partial discharge monitoring and testing technology suitable for the condition assessment of in-service Medium Voltage (MV), High Voltage (HV) and Extra High Voltage (EHV) power cables, switchgear, transformers, generators and motors including Variable/Frequency Drives.

Kronos Spot Tester

The Kronos Spot Tester from Monitra (former HVPD) is a 6-channel synchronous, battery powered test device optimized for field portability enabling testing in various equipment such as cables, switchgear, machines, and transformer.

Routine non-intrusive On-line PD spot testing can be done throughout HV networks. By using pre-installed sensors or installing sensors such as HFCTs, testing can be carried out without the need for an outage.

Parameter	Value
Analogue bandwidth	50 MHz
Sample rate	100 MS/s
Sample memory (one channel)	2 MS
Trace length in each data capture	20 ms
Minimum pulse rise time	10 ns
Input voltage range	1 V / 20 V
Dynamic range	14 bit
Input channel	6
Input connection type	BNC
Trigger	Automatic, AC line supply, internal mains field detector, internal photodiode, and external input
Trigger frequency	25 to 500 Hz
Suitable PD sensors	HVCC, HFCT, TEV, AAP, SMART-TB3™, Bushing Tap Adaptor, UHF (with UHF converter)



Onsite High Voltage consists of Seitz Instruments AG, Onsite HV Solutions AG, and Onsite HV International AG. Onsite HV International AG was founded in 2013 by Paul P. Seitz & Prof. Edward Gulski.

Currently, there are more than 800 OWTS- and DAC-Type systems used in the world. All are manufactured by Seitz Instruments AG Switzerland DAC systems available from 30 kV up to 400 kV for medium, high and extra high voltage power cables.

DAC MV 30/40/60

DAC technology for on-site testing and diagnosis by partial discharges and dissipation factor estimation of all types of distribution power cables.

Parameter	Value		
	MV 30	MV 40	MV 60
Max. Output Voltage	1 to 30 kVpeak*	2 to 40 kVpeak*	2 to 60kVpeak*
Coil inductance	App. 0.75H	App. 1.5H	App. 2.2H
HV excitation current	13mA	6mA	6mA
Frequency range damped AC	20 Hz to 800 Hz		
PD measurement bandwidth	Acc. to IEC 60270		
PD localization bandwidth	150kHz to 50MHz, wide range, automatic bandwidth adaption for short and long cables		
PD measuring accuracy	1 pC		
PD localization accuracy	1.0 m down to 0.1 m		
Calibration mode	Automatic / Manual		
Data Interface	USB 2.0, Ethernet (optional)		
Data acquisition	Integrated 100 MHz DAQ, 8 bit		
TRD joint localization in calibration mode	Integrated		
Dissipation factor estimation range	0.1% up to 10.0%		
Ambient temperature (Operating)	-25℃ to 65℃ , 95% non-condensing		
Storage temperature	-2℃ to 70℃		
Power Supply	Single phase 110 to 240 V, 48 to 63 Hz, 550 VA / 650 VA		
Diameter housing / ground plate	Ø 610 mm / Ø 695 mm		
Weight	App. MV30: 68 kg, MV60: 102kg		

DAC HV 200/ 300/ 400

Parameter	Value		
	HV 200	HV 300	HV 400/500
Max. Output Voltage	200 kV_{peak} 141 kV_{rms}	300 kV_{peak} 212 kV_{rms}	400 kV_{peak} 282 kV_{rms} 500 kV_{peak} 353 kV_{rms}
Coil inductance	App. 3.5H	App. 5.5H	App. 7.6H
DAC Test object capacitance range	0.02 … 45 µF	0.02 … 45 µF	0.02 … 15 µF at 400 kVpeak
HV energizing current, max.	20 mA, up to 80 mA**	13.0 mA, up to 50 mA**	7 mA, up to 28 mA**
Frequency range damped AC	10 Hz to 800 Hz		
PD measurement range	1 pC … 150 nC		
PD measuring bandwidth	Acc. to IEC 60270		
PD localization bandwidth	150kHz to 50MHz		
PD measuring accuracy	1 pC		
PD localization accuracy	1.0 m down to 0.1 m		
Data Interface	USB 2.0, Ethernet (optional)		
Data acquisition	Integrated 100 MHz DAQ, 8 bit		
TRD joint localization in calibration mode	Integrated		
Dissipation factor estimation range	0.1 … 10.0 % / 1 x 10^{-3} … 10 x 10^{-2}	1 x 10^{-3} … 10 x 10^{-2}	
Ambient temperature (Operating)	−25℃ to 65℃ , 95% non-condensing		
Power Supply	3 phases AC 230/400 V ± 10%, 48 to 63 Hz, 5500 VA		
Weight	App. 450 kg	App. 650 kg	App. 770 kg

Note: * = Precision +/- 1 % Resolution 0.1 kV. ** = Requires additional HV slave power supply units.

OLPD-186

A portable high end Online PD detection system for measurement and analysis of partial discharges. Tests are done in line with IEC 60270 and IEC 62478 suitable for routine testing and diagnostics for assessment of service-aged cables.

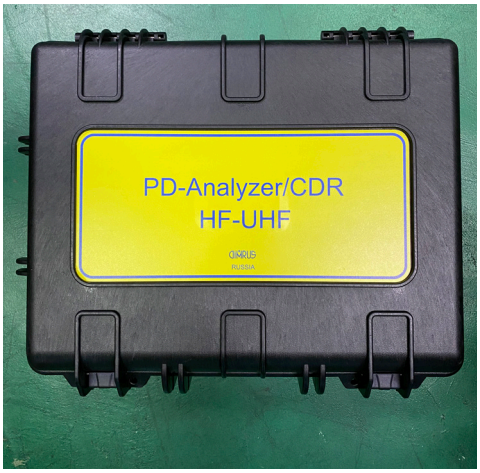
Parameter	Value
PD Channel	- 3 Independent Channels - 50 Ω Impedance - 10 Vms - Sampling Rate 1 GS/s - 14 Bit resolution - 0 Hz to 100 MHz Frequency
Trigger / Synchronisation: Hardware	- AC Mains, internal - Current clamp (optional) - Capacitive (optional)
Trigger / Synchronisation: Software	- PD Level - Auto set - Gating
Alarm functions	- LED Indication - Potential free contact - SCADA - REST API
Software	- Preinstalled on OLPD-185 - PDF Report generator
PD localization bandwidth	150kHz to 50MHz, wide range, automatic bandwidth adaption for short and long cables

Dimrus develops and manufactures a variety of modern diagnostic equipment for monitoring of multiple operating parameters and conditions of almost all electrical and mechanical systems in Medium and High Voltage electrical apparatus. Universal systems for continuous monitoring and portable instruments for periodic testing are available.

PD Analyzer/CDR

The PD Analyzer/CDR device is capable of both online and offline measurements. Also, the testing device is able to analyze partial discharges in the insulation of HV equipment such as Transformers, Cables, GIS, Rotating Machine, Switchgears, and etc.

Parameter	Value
Number of measuring Channels	6
Operating voltage, kV	>3
Discharge amplitude	20 - 100,000 pC
PD measuring range	100 kHz - 1.5 GHz
Synchronization of several devices	GPS, Fiber Optic
Maximum sampling rate	100 MS/s
Power Frequency Sync	Manual, Power, External Sync
Connection	RS-485, USB, LAN, 4G, WIFI, Fiber Optic
Operating temperature	-40℃ to 60℃
Operating Humidity	Up to 80%
Supply voltage	AC/DC 120 to 260, Battery Operate
Device dimensions	53*43.5*24
Total weight	17kg



OWTS (CPDA-15/CPDA-30/CPDA-60)

The CPDA measuring system is an offline non-destructive test designed for prompt diagnostics, search and localization of defect locations in insulation based on partial discharge (PD) measurement and analysis to test new cable lines being put into operation and old cables in operation.

Parameter	Value		
	CPDA-15	CPDA-30	CPDA-60
Maximum Output Voltage	18 Peak 12.5 RMS	28 Peak 20 RMS	56 Peak 40 RMS
Charge Current	Up to 12 mA	Up to 10 mA	
Cable line Capacitance range	0.05 to 10 μF		
Frequency of Measured Partial Discharges	0.15 to 5o MHz		
DAC Frequency range	20 to 1000 Hz		
Tan Delta Measurement	Yes		
Main supply voltage	110 to 240 V AC/DC		
Battery Life	4 to 8 hours		
Transport weight	35 kg	60 kg	120 kg

AR700

The presence of 4 synchronously operating channels to detect defects in the insulation, and locate the place of occurrence. The device is used for measurement and analysis of Oil/Power Transformer, Connecting and Terminal Joints, GIS, and other HV Equipment

Parameter	Value
Number of measuring Channels	4
Operating frequency range of acoustic sensors	30-300 kHz
High frequency channels for PD measurement	1
Frequency range of high-frequency sensors	0.5 to 10 MHz
Measuring frequency on channel	3 MHz
Communication interface	USB 1.1
Operating time from built-in battery	8 Hours
Operating temperature range	-20℃ to 40℃
Weight of device	1.1 kg
Overall dimensions	220x168x37 mm

PD Unit

The PD Unit device is used for preliminary measurement and analysis of Transformers, Connecting and Terminal joints, GIS, and other HV equipment.

Parameter	Value
Acoustic Channel (built-in and external)	
Frequency range of partial discharge pulse	40 ± 2 kHz
Amplitude range of partial discharge pulse	80 dB
Acoustic Emission Channel	
Frequency range of partial discharge pulse	10-500 kHz
Amplitude range of partial discharge pulse	80 dB
TEV Channel (built-in) / High Frequency Channel (HF)	
Frequency range of partial discharge pulse	0.1-50 MHz
Amplitude range of partial discharge pulse	60 dB
Ultra High Frequency (UHF) Channel	
Frequency range of partial discharge pulse	440-1500 MHz
Amplitude range of partial discharge pulse	-5 to -70 dBm
General Characteristic of Device	
Operating time from internal battery	6 hours
Range of external operating temperature	-20℃ to 45℃
Overall dimension of the device	170*115*45 mm
Weight of device	0.7 kg
Storage capacity	256 MB

CDM (Cable Diagnostic Monitor)

The presence of 4 synchronously operating channels to detect defects in the insulation, and locate the place of occurrence. The device is used for measurement and analysis of Oil/Power Transformer, Connecting and Terminal Joints, GIS, and other HV Equipment

Parameter	Value
Number of Monitored Line	Up to 45
Operating voltage of lines	> 3 kV
Length of controlled line	Up to 4 km
Frequency of discharge pulses	0.5 to 15 MHz
Discharge value	20 to 100,000 pK
Error in Calculating Defect Location	±1% of length
Connection	RS-485, Ethernet
Supply Voltage	90 to 260 V AC/DC
Operating temperature range	-40℃ to 60℃
Dimensions of the mounting cabinet	700*500*250*
Weight of cabinet with device	20 kg

TDM-10s/35s

The TDM-10s/TDM-35s monitoring system is designed for monitoring of technical condition and operation management of power transformers with an operating voltage of 6-10 kV and 10-35kV.

Parameter	Value	
	TDM-10S	TDM-30S
Voltage of the controlled transformer	6 to 10 kV	10 to 35 kV
Load current in CT circuit	5A	
Controlled temperature range	-55℃ to 150℃	
Range of discharge pulses	-60 to -8 dBm	-70 to 0 dBm
Vibration range	10 to 1000 Hz	
Applicable with	UHF, HFCT, HVCC	
Dimension of the monitoring system body	200*170*77	280*210*100
Weight of assembled device	2 kg	3.5 kg
Operating Temperature	-40℃ to 65℃	
Supply voltage	110 to 220 V AC/DC	
Power consumption, no more than	5 W	10 W
Number of relays for controlling the transformer cooling system	None	2

Mini Cam (Corona Camera)

The Mini CAM-ATEX could identify gas, pressure, and vacuum leaks, as well as corona, arcing, and partial discharge faults up to 120 meters away. The Mini CAM is a standalone system for acoustic image measurements and signal analysis.

Mini Cam (Corona Camera)	
Technical Data of Acoustic Imager	
Effective frequency range	2 to 55kHz (support extensions)
Signal to noise ratio	64.3 dB(A)
Leak detection rate	1m @ 0.1BAR @0.094L/min
Detection distance	0.3m to 200m (real test situation)
Technical Data of Optional Thermal Camera	
Thermal Sensitivity NETD	25mK@30℃
Temperature measurement range	-20℃ to 650℃

Contact us

Plan Market Gold Co., Ltd.
194 Ramkhamhaeng 24, Yaek 24,
Huamark, Bangkapi,
Bangkok 10240, Thailand.

Tel. (66)2-314-1341-2
Fax. (66)2-3141343
Email : planmarketgold@gmail.com
Website : www.planmarketgold.com