



## Electrosurgical Grounding Pads



Manufactured by 3M  
Medical Division

# The revolutionary electrosurgical pad that's easy to place because of its smaller size.

The Medline Universal Electrosurgical Pad 9100 Series with proprietary *Safety Ring* is a breakthrough in electrosurgical pad technology. This pad is smaller in size—a mere 15 square inches—so it's very easy to place, and meets the same thermal performance standard as traditional pads up to 33% larger in conductive surface area.

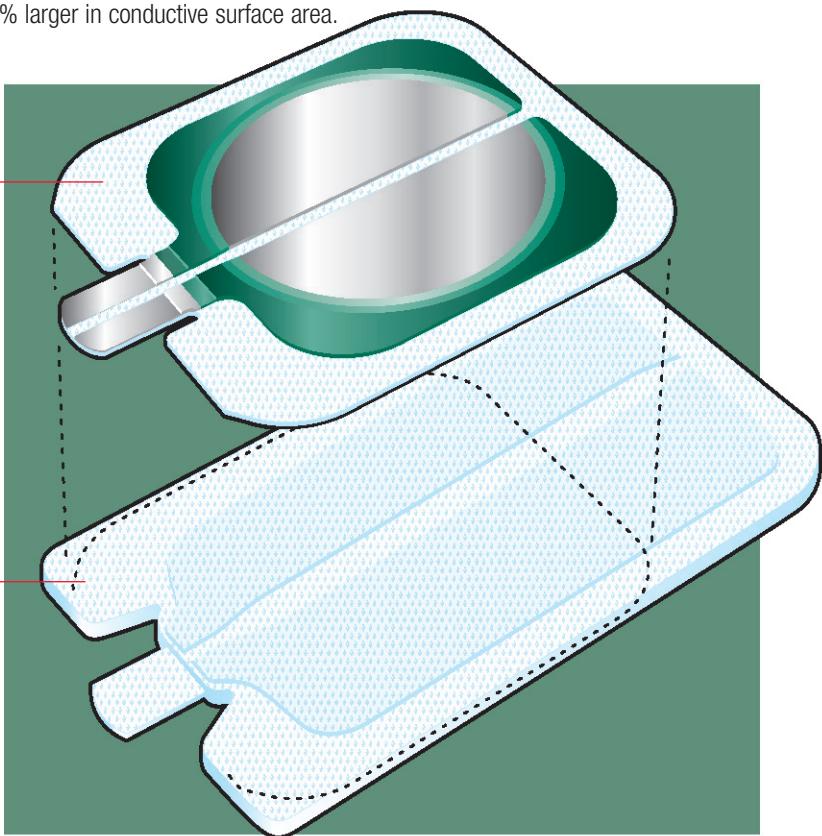
## Medline Universal Electrosurgical Pad

### *Safety Ring*

Meets the same thermal performance standard as traditional pads.

## Traditional Pad Size

Pads of traditional design are larger than the more efficient Electrosurgical Pad 9100 Series.



## Safe electrosurgical pad placement can be a challenge. The Medline Universal Pad with Safety Ring is the solution...

An electrosurgical pad should be placed on a well-vascularized muscular surface. However, the large 20 square inch pads currently in widespread use can be difficult to place, and therefore, the Medline Universal Pad with *Safety Ring* is an excellent choice.

### Large pads are difficult to place on patients who are:

- small in size and weight
- emaciated
- elderly
- with limited muscle tissue
- afflicted with a skin malady
- suffering from burns over a significant percentage of the body

### Availability of sites for the placement of all electrosurgical pads is reduced by the presence of:

- scar tissue
- bony prominences
- implants
- pacemakers
- excessive hair
- weight bearing sites
- suffering from burns over a significant percentage of the body
- skin surface where fluid might pool

Furthermore, a variety of procedures require more than one surgical site and therefore more than one electrosurgical pad. In such instances available sites for pad placement are limited.

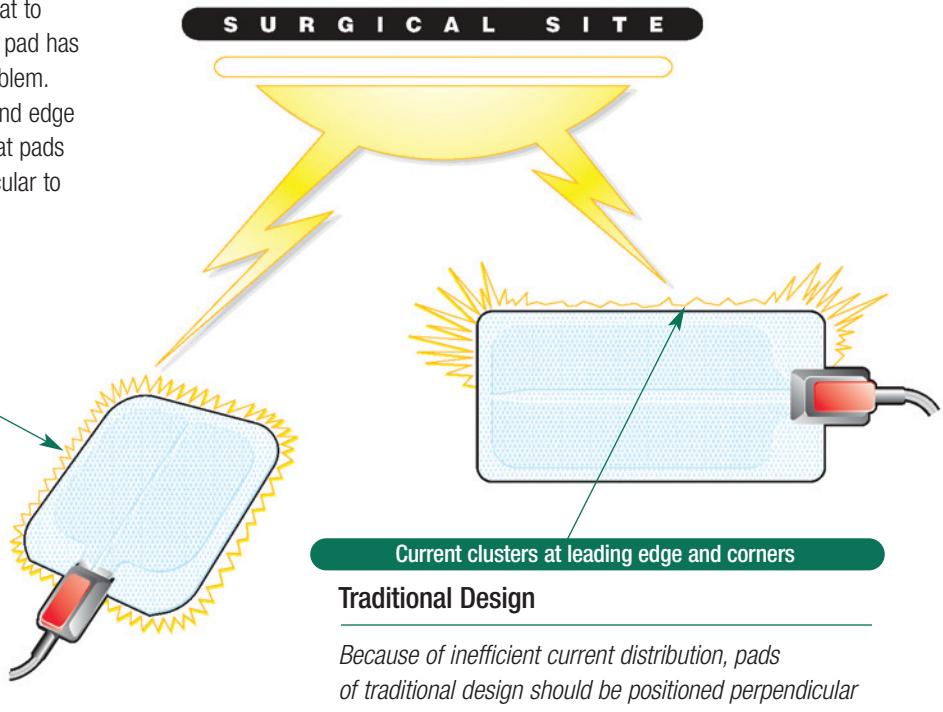
### Greater Versatility...the smaller size of the Medline Universal Pad means:

- more convenient handling
- less area on patient to prep
- a greater number of suitable placement sites

The small size, shape, and thin, but tough, construction of the Medline Universal Pad 9100 Series encourages optimum use by eliminating the need for compromise on pad application sites. Since only a small area is needed for application, this pad will fit a greater number of suitable sites on the patient's body.

# The solution to an old problem...

The tendency of electrosurgical current and heat to cluster at the leading edge of a non-capacitive pad has been a long standing industry-wide design problem. Because of this clustering (known as "corner and edge effect"), safety considerations have dictated that pads should be placed with the long edge perpendicular to the surgical site.



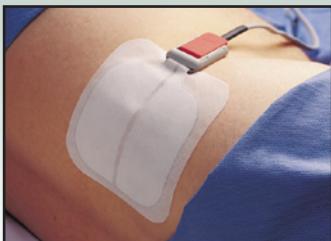
## Medline Universal Electrosurgical Pad with *Safety Ring*

*The revolutionary green Safety Ring provides Medline's pad with greater efficiency and reduced corner and edge effect, thereby allowing for smaller size and universal orientation.*

## Traditional Design

*Because of inefficient current distribution, pads of traditional design should be positioned perpendicular to the surgical site to avoid burns.*

## Proprietary *Safety Ring* allows for *universal orientation* and convenience...



The proprietary *Safety Ring* allows the pad to be oriented to the surgical site in any direction. There is no need to worry about restrictions on pad orientation, as was the case with previous pad technology. A smaller electrosurgical pad with universal orientation capabilities was a goal that had been researched and sought by many — but it took 3M innovation to finally accomplish this significant industry breakthrough.

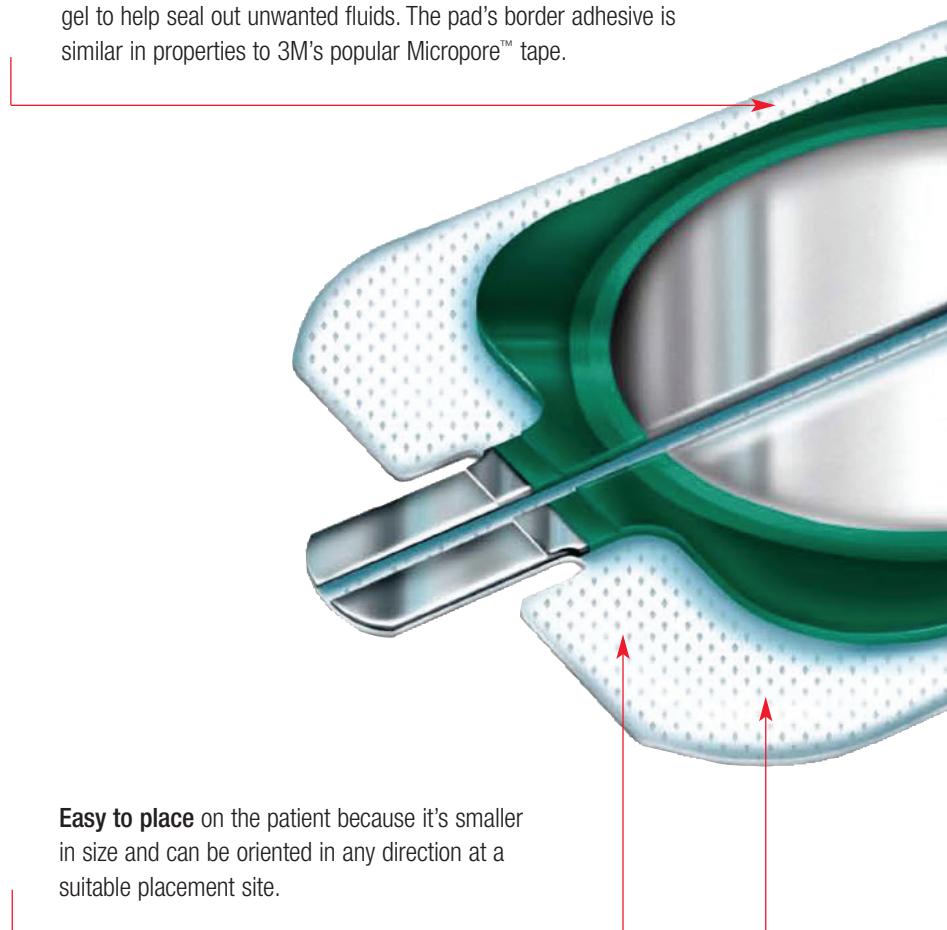
The *Safety Ring* reduces corner and edge effect by more uniformly dispersing electrosurgical current over the entire conductive surface of the pad. The Medline Universal Pad 9100 Series meets the performance criteria set forth by the Association for the Advancement of Medical Instrumentation (AAMI) for maximum safe temperature rise (ANSI/AAMI HF18:2001, Section 4.2.3.1).

# The patented *Safety Ring* is the difference between the Medline Universal Electrosurgical Pad and traditional grounding pad technology.

- **Medline universal pad:** the universal pad demonstrates a maximum temperature rise similar to traditional pads up to 33% larger and meets AAMI temperature rise criteria (AAMI Standard HF18, 1993 Revision, Section 5.2.3.1).
- **Easy, universal orientation:** forget about the limitations of old technology pads—you can place the Medline Universal Pad in the most convenient direction—at any suitable application site. And the smaller size means the pad will fit a greater number of suitable placement sites on the patient.
- **More evenly distributed current:** current is reduced at leading edge and corners—edge and corner effect is diffused through uniform current dispersion, and meets the same thermal performance standard as traditional pads up to 33% larger in conductive surface area.
- **Cost-effective:** you can standardize on the Medline Universal Pad, eliminating SKUs; as long as 100% of the pad makes full contact with the patient at a suitable placement site without overlap, there are no limitations on age or weight. A separate inventory of “infant” pads may not be necessary.
- **Three-year shelf life:** allows for efficient inventory management.
- **Latex indication:** neither natural rubber latex nor dry natural rubber are components in Electrosurgical Pads 9100 Series or their packaging.
- **Broad compatibility:** the Medline Universal Pad with Safety Ring has been specifically designed to be compatible with electrosurgical generators (ESUs) used in surgical procedures defined by the ANSI/AAMI Standard HF18:2001, Electrosurgical Devices.
- **Also available are Medline Universal Electrosurgical Pads 9100 Series with pre-attached cords:** securely attached to reinforced tabs and over-wrapped with foam, providing a mechanical electrical connection that is safe and comfortable to the patient.

## Unique backing keeps out unwanted fluids

- Backing includes a non-woven laminant and a thick (3 mil) layer of polyethylene — a construction similar to that of surgical drapes. This material forms a barrier to moisture; it is waterproof and fluid resistant.
- Non-conductive isolation border surrounds the conductive adhesive gel to help seal out unwanted fluids. The pad's border adhesive is similar in properties to 3M's popular Micropore™ tape.



**Easy to place** on the patient because it's smaller in size and can be oriented in any direction at a suitable placement site.

**Stress flaps** play a critical role in holding the tab end of the plate securely to the patient, minimizing dislodging if the cable or cord is inadvertently pulled.

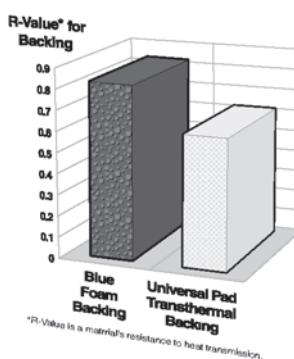
**Green Safety Ring** disperses electrosurgical RF current more uniformly over the pad's entire surface. This allows the pad to be smaller and easier to place, and to meet the same thermal performance standard as traditional pads that are up to 33% larger in conductive surface area.

**Excellent pad-to-skin contact:**  
Water-based hydrophilic conductive adhesive provides exceptional pad-to-skin contact, flowing uniformly into skin crevices.

**Helps reduce chance of skin stripping:**  
For patients with fragile skin, our non-aggressive border adhesive reduces possibility of skin stripping.

**Medline's Transthermal Backing permits heat to escape faster:**

Older grounding pad technology uses foam as the backing material of choice. Unfortunately, foam locks in heat. The Medline Universal Pad employs a transthermal backing material similar to that of surgical drapes, letting heat escape 25% faster than foam and reducing risk of unsafe temperature rise.



## Medline Electrosurgical Pencils

Designed exclusively for the surgeon who requires the traditional "feel" they are accustomed to.

Featuring soft buttons, soft cords and high quality plugs. All pencils are manufactured to the highest degree of quality and are guaranteed.

All pencils are latex free, sterile and packaged with a safety holster.

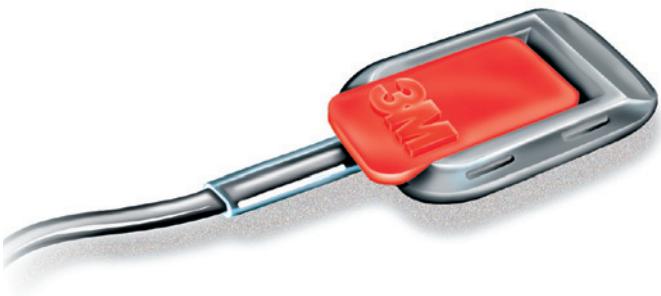
VEGA SERIES:  
Blue Silk™  
ESPB3002



Check out all the Electrosurgery products Medline has to offer at  
[www.medline.com](http://www.medline.com)

# 21100 Series multiple-use cables deliver value and quality.

In one year, through 10,000 surgical procedures, the average hospital will throw away 19 miles of costly copper cable. To help you reduce waste and save dollars, Medline brings you the 21100 Series multiple-use cable with pre-attached clamp and compatible generator adapter.

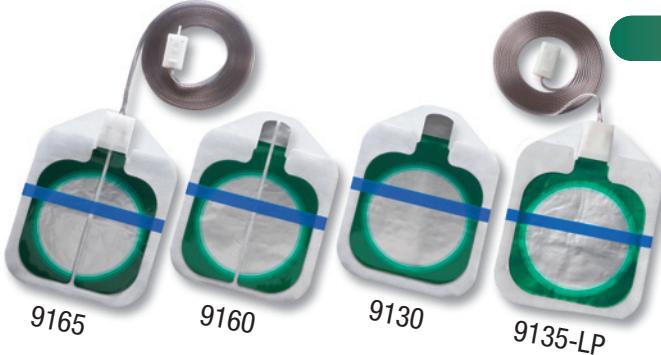


*To help you reduce waste and save dollars, Medline brings you the 21100 Series multiple-use cable with pre-attached clamp and compatible generator adapter.*

- **Dollar savings:** hospitals pay as much as 40% more for electrosurgical pads with pre-attached cords than for pads without pre-attached cords. Hospitals can enjoy considerable savings with multiple-use cables and non-corded pads.
- **Environmentally friendly:** use of multiple-use cables means miles of copper wire will not become waste. And there is no PVC in 21100 Series multiple-use cables and clamps.
- **Compatible:** the 21100 line of cables and clamps is compatible with virtually all electrosurgical generators.
- **AAMI Standards:** the 21100 Series multiple-use cables and clamps meet standards set by the Association of the Advancement of Medical Instrumentation for Electrosurgical Devices, cables and accessories (ANSI/AAMI HF18:2001).
- **Latex indication:** neither natural rubber latex nor dry natural rubber are components in 21100 Series multiple use cables and clamps or their packaging.
- **Convenient:** the 21100 Series cables and clamps have chemical resistance and can be cleaned easily after use with a wide variety of cleaning materials. They can be exposed to the ETO sterilization process but must be aerated for 16 hours after ETO sterilization.
- **Reduces potential for skin trauma:** the low profile and smooth clamp assembly of the 21100 Series decreases the likelihood of skin trauma.
- **Extra-strong holding force:** the 21100 Series clamp employs the “torturous path” concept in its design giving it a holding force that is secure and safe.
- **Long life:** the strong design and materials used make the 21100 Series heavy duty and impact resistant.

# Medline Electrosurgical Patient Plates – 9100 and 1100 Series

**Medline Universal Electrosurgical Pad 9100 Series with *Safety Ring*.** The revolutionary electrosurgical pad is easy to place because of its smaller size.



## 9100 Series

The Medline 9130, 9135-LP, 9160, and 9165 Universal Grounding Pads all have a conductor area of 15 square inches, and come with the patented 3M Green *Safety Ring* technology which allows them to meet the same thermal performance standard as traditional pads up to 33% larger in conductor area. In addition, they have fluid resistant, non-woven backing which allows heat to pass through up to 25% faster than foam, and they have no minimum age or weight limit.

**Medline Electrosurgical Patient Plates 1100 Series. Low impedance connection with minimal skin irritation and trauma.**

- Lightweight, conformable foam backing
- Stress flaps to secure tab end of pad
- 3M water-based (hydrophilic) conductive adhesive readily flows into skin crevices, providing exceptional pad to skin contact

- Non-conductive border adhesive
- Available in split and solid styles, and with or without pre-attached cord

## 1100 Series Large

The 1100 Series Large Electrosurgical Patient Plates have a soft, gel-like, conductive adhesive surrounded by an isolation border on a white foam backing. The Medline 1149, 1149C-LP, 1179, and 1180 grounding pads all have a conductor area of approximately 20 square inches.



## 1100 Series Small

The Medline 1146, 1148-LP, 1181, and 1182 grounding pads all have a conductor area of approximately 10 square inches, have a white foam backing, and are intended for use when a larger pad is too big to use at a recommended placement site.

## Ordering Information for Medline Electrosurgical Grounding Pads

| Catalog Number | Description                                      | Conductive Adhesive Area       | Pads/Pouch | Pads/Shipper |
|----------------|--|--------------------------------|------------|--------------|
| 9130           | Standard (non-split), non-corded                 | 15 sq. in./97cm <sup>2</sup>   | 1          | 100          |
| 9130F          | Standard (non-split), non-corded                 | 15 sq. in./97cm <sup>2</sup>   | 5          | 200          |
| 9135-LP        | Standard (non-split), precorded with large plug  | 15 sq. in./97cm <sup>2</sup>   | 1          | 40           |
| 9160           | Split, non-corded                                | 15 sq. in./97cm <sup>2</sup>   | 1          | 100          |
| 9160F          | Split, non-corded                                | 15 sq. in./97cm <sup>2</sup>   | 5          | 200          |
| 9165           | Split, precorded                                 | 15 sq. in./97cm <sup>2</sup>   | 1          | 40           |
| 9165L          | Split, precorded with 15' cord                   | 15 sq. in./97cm <sup>2</sup>   | 1          | 40           |
| 1179           | Large split pad, precorded                       | 20 sq. in./129cm <sup>2</sup>  | 1          | 40           |
| 1180           | Large split pad, non-corded                      | 20 sq. in./129cm <sup>2</sup>  | 1          | 100          |
| 1180F          | Large split pad, non-corded                      | 20 sq. in./129cm <sup>2</sup>  | 5          | 200          |
| 1181           | Small split pad, precorded                       | 10 sq. in./64.5cm <sup>2</sup> | 1          | 40           |
| 1182           | Small split pad, non-corded                      | 10 sq. in./64.5cm <sup>2</sup> | 1          | 100          |
| 1149C-LP       | Large (non-split) pad, precorded with large plug | 20 sq. in./129cm <sup>2</sup>  | 1          | 40           |
| 1149           | Large (non-split) pad, non-corded                | 20 sq. in./129cm <sup>2</sup>  | 1          | 100          |
| 1149F          | Large (non-split) pad, non-corded                | 20 sq. in./129cm <sup>2</sup>  | 5          | 200          |
| 1148-LP        | Small (non-split) pad, precorded with large plug | 10 sq. in./64.5cm <sup>2</sup> | 1          | 40           |
| 1146           | Small (non-split) pad, non-corded                | 10 sq. in./64.5cm <sup>2</sup> | 1          | 100          |

Latex indication: neither natural rubber latex nor dry natural rubber are components in Medline Electrosurgical Pads or their packaging.

**1-800-MEDLINE (633-5463)**

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