



NORCOMP

MEDICAL INTERCONNECTS

WHEN IT'S ALL ON THE LINE: *NORCOMP MEDICAL INTERCONNECTS* NEVER MISS A BEAT

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WHEN IT'S ALL ON THE LINE

NORCOMP MEDICAL INTERCONNECTS NEVER MISS A BEAT

ROBOTIC-ASSISTED SURGERIES IN 1985

1

1. The number of annual robotic-assisted surgeries, once a far-fetched technology, now rivals the population of San Francisco, California.
2. Surgeons steer robotic arms through delicate procedures—while sitting an ocean away from the patient.
3. New advancements in AI, high-speed connectivity, and robotic capabilities are expanding healthcare horizons.

ROBOTIC-ASSISTED SURGERIES IN 2020

876,000

Reliable interconnects are the nerve cells of these awe-inspiring developments.

- They're responsible for transmitting the signals that operate behemoth MRI magnets 30,000 stronger than Earth's magnetic field.
- They support robotic-assisted surgeons with the insights they need to finesse meticulously calibrated maneuvers.

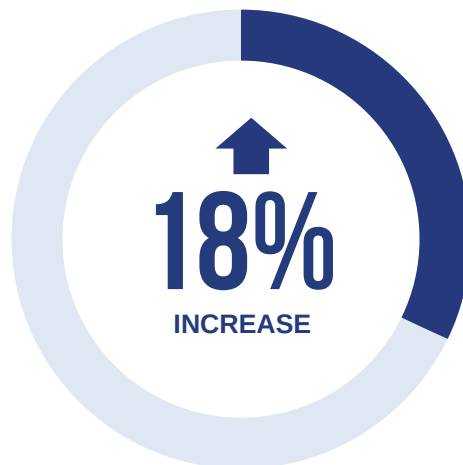
WHEN EVERY SECOND COUNTS, BRING YOUR MEDTECH INNOVATION TO LIFE WITH NORCOMP

876,000

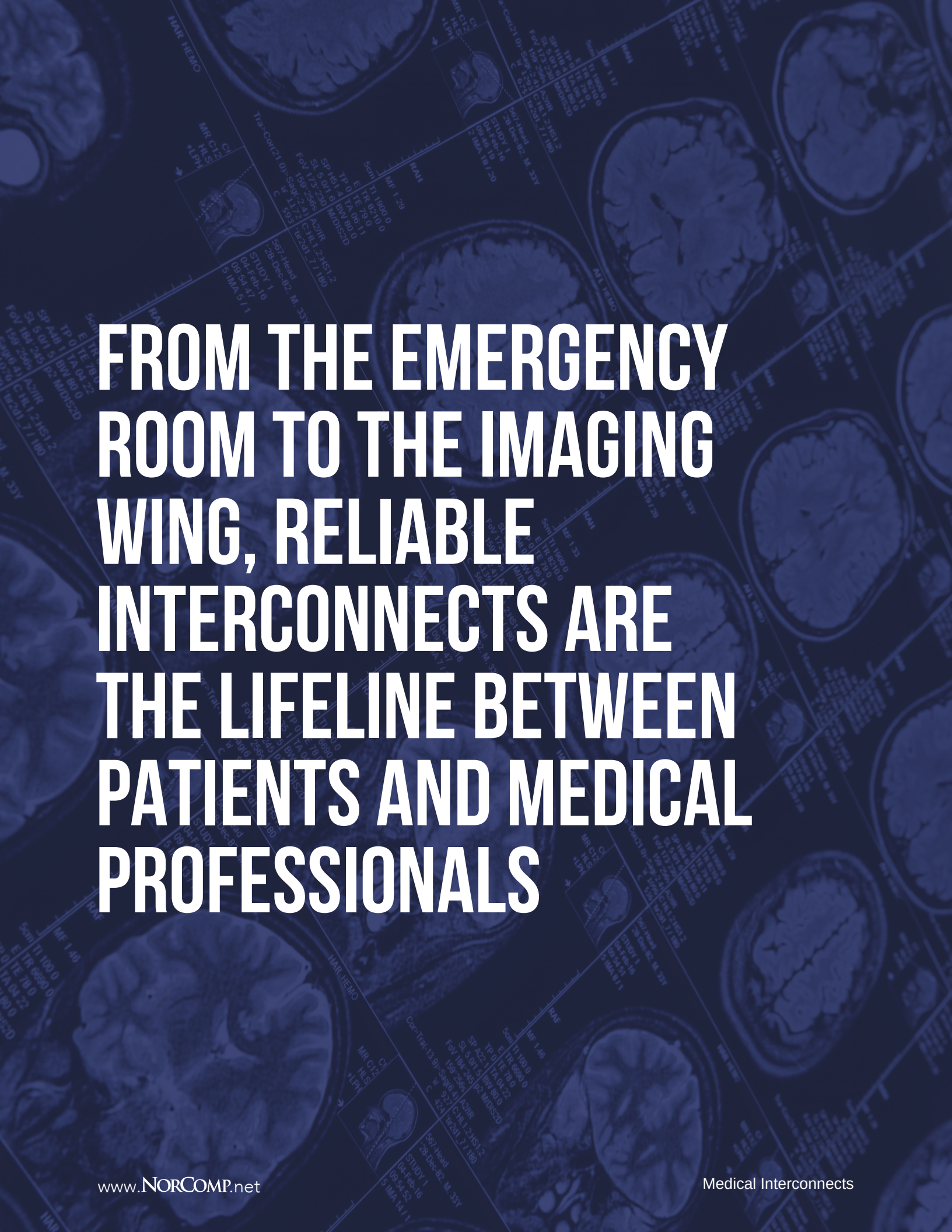
ROBOTIC-ASSISTED SURGIES
were performed in the U.S. in 2020

1,864 MI

The distance between the doctor and patient during the first 5G-powered brain procedure in March 2020



**IN ROBOTIC-ASSISTED
SURGERIES BY 2030**



**FROM THE EMERGENCY
ROOM TO THE IMAGING
WING, RELIABLE
INTERCONNECTS ARE
THE LIFELINE BETWEEN
PATIENTS AND MEDICAL
PROFESSIONALS**



**CT SCANS, ULTRASOUNDS,
AND MRIS SEE INSIDE OUR
BODIES IN REMARKABLY
DETAILED PICTURES.**

PORTABLE, HANDHELD MEDICAL DEVICES

Many of today's medical devices are always on the move. Vitals monitors and portable diagnostic machines are subject to repeated mating and washdown—and interconnects must stand up to the job in all wings of a medical center.

DIAGNOSTIC IMAGING SUITE

CT scans, ultrasounds, and MRIs see inside our bodies in remarkably detailed pictures. Interconnects that can survive rough handling, frequent maneuvers, and a high number of mating cycles mean more accurate, reliable imaging.

ROBOTIC-ASSISTED SURGERY

The instruments are tiny, but they give surgeons jaw-droppingly magnified views and twist far beyond a human's range of motion. It's a highly precise ballet supported by an endless stream of real-time data. Ruggedized, secure-lock interconnects keep information flowing when it's needed most.

PATIENT-MONITORING EQUIPMENT

Temperature, blood pressure, pulse oximetry, heart rate—patient movements can't disconnect healthcare professionals from these vital signs. Rugged, compact interconnects keep data flowing even under the most clinically critical conditions.



VITAL SIGNS

HOW NORCOMP INTERCONNECTS BREATHE
LIFE INTO MEDICAL INNOVATIONS

RUGGEDIZATION

Medical devices face frequent chemical washdowns and brushes with hazardous biological materials. IP67/68-rated corrosion-resistant interconnects withstand the rigors of any hospital setting. Watertight seals sustain the harsh beating of cleaning, radiation, and sterilization.

EXTREME DURABILITY

Interconnects inside machines undergo constant mechanical stress. Those operated by technicians are constantly on the move. Our connectors are armored against rough handling and jostling to guarantee performance when it matters most.

SMALL FOOTPRINTS FOR COMPACT EQUIPMENT

There's limited real estate aboard handheld imaging devices and portable monitors. Bulky, oversized options are a no-go. You need small-profile connectors that can squeeze into the compact form factors of today's miniaturized diagnostic, therapeutic, and operating equipment.

INTERCHANGEABILITY

Nurses, physicians, and administrators shuttle critical equipment through the miles of winding hallways that make up an average hospital. Once they reach their destination, there's no time to fumble for the right cable. Our connectors are highly interchangeable, allowing quick access to various systems. Push-pull connectors mate with an audible click, while foolproof color-coding options prevent mismatches.

HIGH MATING CYCLES

Connect, disconnect, connect, disconnect...portable equipment is always on the go. Connectors like the QUIK-LOQ are rated for over 5,000 cycles, meaning you can safely unhook equipment several times a day for more than four years.

AND WE'RE ALWAYS BY YOUR SIDE

We know that connectors can't hold up the line when launching a life-saving technology. A company that truly cares about your project and works so closely with you to understand your goals may come to feel like an extension of your internal team. At NorComp, your project is more than an anonymous number: two-pronged availability means our products are readily on hand, and our engineers are always by your side.



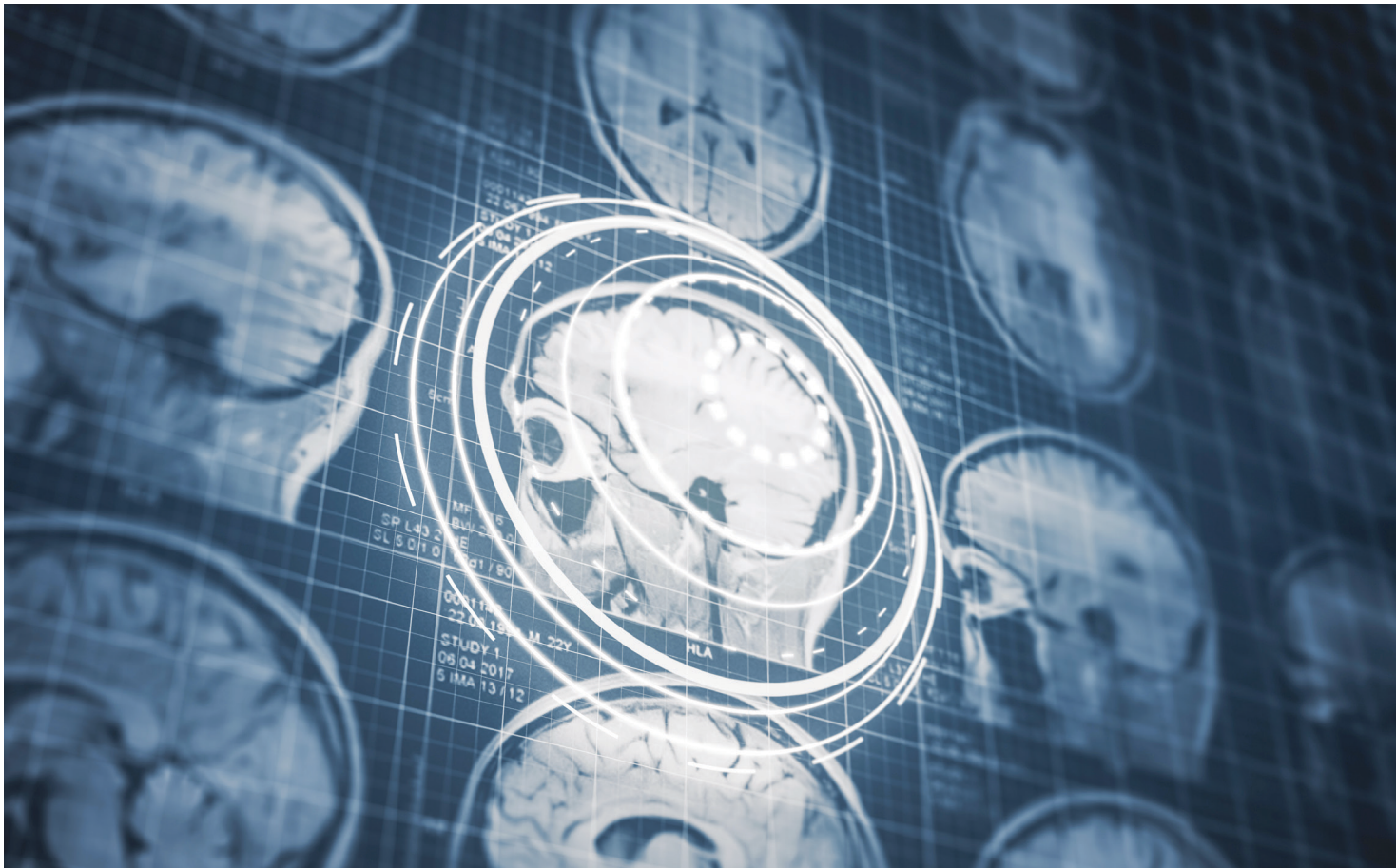
FEATURED CASE STUDIES

A MEDICAL INNOVATOR, A TOP-SECRET PROJECT, CHANGING THE WORLD FOR X-RAY PROCEDURES

At NorComp, we're white-glove listeners. We're able to read between the lines of confidential projects to truly understand the needs of our customers.

When you're on the bleeding edge of life-changing technologies, sometimes you need to keep your idea close to the vest. And at NorComp, we understand that.

Information for this project was highly restricted, limiting access to connector drawings. So our team got to work on reverse engineering the project. We took apart the existing connector, measured extensively, and squeezed every last detail out of limited information. We provided the first article for a fully customized push-pull connector in 10 weeks, with a savings of \$100 per part, to boot.





FUELING ROBOTIC SURGEONS WITH RELIABLE INSIGHTS

Robotic surgeons crunch through terabytes of data to design surgical plans. Real-time data underpins the calculations that guide incisions and place implantables.

Instant access to live data is the lifeblood of any robotic-assisted surgery.

For a top leader in robotic back surgery, pinpoint accuracy is a must. Tugs and jostles can't interrupt the data powering their tech-enabled procedures. *For this client, the locking mechanism of our QUIK-LOQ push-pull connectors was key.*

WHEN “BACK TO THE DRAWING BOARD” IS NOT AN OPTION

A world leader in dialysis equipment was in a jam. To fit IP67 connectors into their newly designed product, their connector provider said they'd have to re-engineer the enclosure.

Redesigns delay manufacturing times. More damaging to your bottom line, they can send even your most loyal customers in search of alternatives. Months, if not years, of work down the drain due to a connector's overbulky waterproofing.

Back to the drawing board? Absolutely not.

The customer came to NorComp for a look at the SEAL-D, a D-Sub connector well-known for packing IP67 waterproofing into a surprisingly small package.

The smaller connector footprint allowed this client to keep their current design without redoing the outer shell. They were able to meet project timelines and submit for FDA approval right on track.



FIND THE RIGHT CONNECTOR FOR YOUR MEDICAL PROJECT



821 K SERIES POWER CONNECTOR CABLE MOUNT

QUIK-LOQ CONNECTORS

- Rapid Latching Release Mechanism with Alignment Key
- Small, rugged precision design
- Waterproof IP67 rating
- Available in varying pin positions
- Accepts 14-28 awg wires (based on # of positions)
- Rated for 2 to 30 amps depending on # of positions
- High Mating Cycles (>5000)
- Machined contacts and housing
- 360° shielding for full EMI / RFI



VULCON STEEL - 4 PIN D-CODE

VULCON STEEL

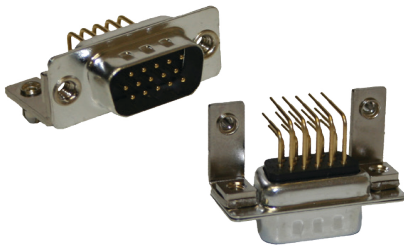
- Available in pin counts ranging from 3 to 12 positions
- IP67/68 Performance in both mated / unmated conditions
- Solder Cup, Vertical Mount, and Right Angle Board Mount options, Cable Mount in hybrid or 316 Stainless Steel
- Up to 5 Amp contact rating / -40° to +85°C
- A, D, X, & L codes available
- Available as loose piece or as pre-made M12 cables



M12 CONNECTOR SERIES

VULCON

- Available in 4 sizes | 16mm, 12mm, 8mm, & 5mm diameters
- Available in pin counts ranging from 2 to 17 positions
- IP67/IP68 Performance in both mated / unmated conditions
- Solder Cup, Vertical Mount, Right Angle Board Mount, & 2-piece M12s for automated assembly.
- Cable mount available loose piece or as pre-made cables
- Up to 5 AMP contact rating / -40°C to +85°C
- Full metal shells for EMI/RFI shielding
- A, B, D, L, S, T, & X codes available



15 PIN HD - 781M SERIES

SEAL-D

- Signal / Low Power in 6 standard sizes:
 - Standard Density: 9, 15, 25
 - High Density: 15, 26, 44
- Combo-D / High Power in several configurations
- Solder Cup, Vertical Mount, & Right Angle Board Mount Options
- High Reliability Screw Machined Contacts
- 3 amp / 5 amp / 20 amp / 40 amp Power Options
- -55C to +105C Operating Temperature Range
- 100% IP Compliant Guaranteed | Made in U.S.A
- IP67 Performance



CDF VERTICAL SOLDER NN-JACKSCREW

NANOOK

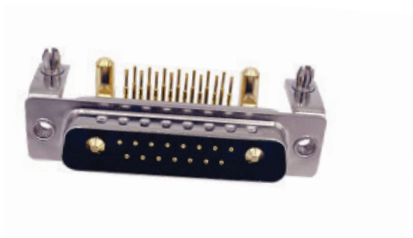
- Available in 4 Shell Sizes | (E / A / B / C)
 - Standard Density: 9, 15, 25, 37
 - High Density: 15, 26, 44, 62
 - Combo-D: 12 Variations
- Meets IP67 Performance Requirement
- Up to 40 AMP Power Contact Rating
 - Standard Density 5A
 - High Density 3A
 - Combo-D 20A/40A
- Solder Cup, Vertical Solder, & Right Angle Solder Board Mount Options
- -25°C to +85°C Operating Temperature



15 PIN 580 SERIES PANEL MOUNT

MICRO-D CONNECTORS

- Available in 3 industry standard sizes (9, 15, 25)
- Vertical Board Mount, Right Angle Board Mount, and Cable Mount options
- 0.050" (1.27mm) contact spacing. Less than 1/3 the size of a standard D-Sub
- Metal to metal interface for robust mechanical connection and shield effectiveness
- 1 amp contact rating / -55C to +85C operating temperature range
- Compatible with most commercial competitors products
- **Backshells Available for MICRO-D Series**



7W2 684S SERIES BOARD MOUNT

POWER-D

- Available in 12 industry standard sizes
- Solder Cup, Vertical Mount, and Right Angle Board Mount options
- Screwed machine contacts for high mating cycles
- Power contacts rated 20/40 amps
- Signal contacts rated for 5 amps
- Intermates with most commercial competitor products



7W2 684S SERIES BOARD MOUNT

ARMOR

- Available in 5 industry standard sizes
 - Standard Density: 9, 15, 25, 37, 50
 - High Density: 15, 26, 44, 62, 78
- Perimeter sealing lips for secure assembly
- Die Cast metal shells provide excellent EMI/RFI shielding
- Plated with a high quality nickel finish
- Available in a variety of cable entries
- Compression or Mechanical strain reliefs
- Various mating hardware available



 **NORCOMP**

MEDICAL INTERCONNECTS

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