





# The Cell IQ Family.

You Choose the Size. We Deliver Maximum Power.

# YOU CHOOSE THE SIZE. WE DELIVER

THE CELL IQ FAMILY MADE BY TELEGÄRTNER.

**4.3-10** SCREW OR PUSH IT ON



- **53** % SIZE

2.2-5
SCREW OR PUSH IT ON





Passive intermodulation

-166 dBc @ 2 x 43 dBm

Power handling

700 W (1 GHz); 500 W (2 GHz)

Return loss (typ.)

up to 6 GHz - 32 dB

Frequency range up to 6 GHz

Mating cycles

>100

Recommended torque/ Screw type

5 Nm

IP classification

IP68





# 1 Jack. 3 Plugs.



- Screw-on variant with max. recommended torque of 1-5 Nm
- For indoor and outdoor applications
- For use in extreme climatic conditions



- For screwing on by hand
- Special feature to prevent unwanted loosening of the coupling nut
- For indoor applications



- Quick engagement / disengagement
- No tooling required
- Self-locking
- For indoor and outdoor applications

# **MAXIMUM POWER.**

1.5-3.5 **SCREW OR PUSH IT ON** 

**- 47** % **SIZE** 



-166 dBc @ 2 x 43 dBm

Power handling 250 W (2 GHz, 40 °C)

Return loss (typ.)

up to 6 GHz - 30 dB

Frequency range up to 20 GHz . (Special Version)

Mating cycles >100

Recommended torque/ Screw type 3 Nm

IP classification



Passive intermodulation

-166 dBc @ 2 x 43 dBm

Power handling

100 W (2 GHz)

Return loss (typ.)

up to 6 GHz - 32 dB

Frequency range

up to 30 GHz (Special Version)

**Mating cycles** 

>100

Recommended torque/ Screw type

1 Nm

IP classification

**IP68** 



# The Cell IQ Family made by Telegärtner:

- ✓ Saving on space and weight due to compact design
- √ Optimized for various corrugated cables
- ✓ Very low PIM values, independent of tightening torque and locking mechanism
- ✓ Contact areas protected from damage even when not mated
- ✓ Screw, Hand Screw and Push-Pull options with universal jack
- ✓ Extremely reliable: rugged design for harsh environmental conditions
- √ Customized solutions

# **4.3-10 Series**

# The Industry Standard.

Due to their compact design these connectors do justice to the miniaturisation of mobile radio network components.

Despite their size, compared to the traditional 7-16 series, the connectors guarantee excellent return loss and passive intermodulation performance (PIM) levels. In addition, the new connector series is very variable, since one universal cable jack is suitable for mating with 3 different cable plug designs.



Screw, Hand Screw and Push-Pull options with same jack



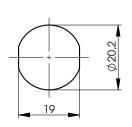


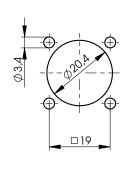


### **Cable Types**



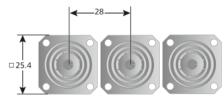
### **Mounting Dimensions**





4.3-10

7-16 to 4.3-10



Z150 Z151

# **2.2-5 Series**

# **Highest RF-Power in Class.**

The 2.2-5 series has adopted the successful concept of 4.3-10 and reduced the size accordingly. While the 4.3-10 typically require the same installation space as the classic N-connector, the 2.2-5 are satisfied with the standard installation dimensions of the TNC series

Despite the significant reduction in dimensions and weight, the series 2.2-5 has comparable electrical and thermoclimatic characteristics to the Series 4.3-10, and can be used both indoors and outdoors with corrugated sheathed cables up to the common 1/2" types.



Screw, Hand Screw and Push-Pull options with same jack



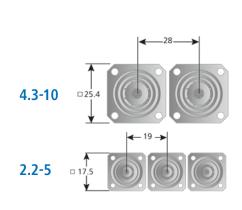




### **Cable Types**



# Mounting Dimensions \$\phi\_{\frac{1}{2}}\$ \[ \frac{\phi\_{\frac{1}{2}}}{2166}\] \[ \frac{\phi\_{\frac{1}{2}}}{2167}\]



4.3-10 to 2.2-5

# 1.5-3.5 Series

Best Size-Power Ratio in the Market.

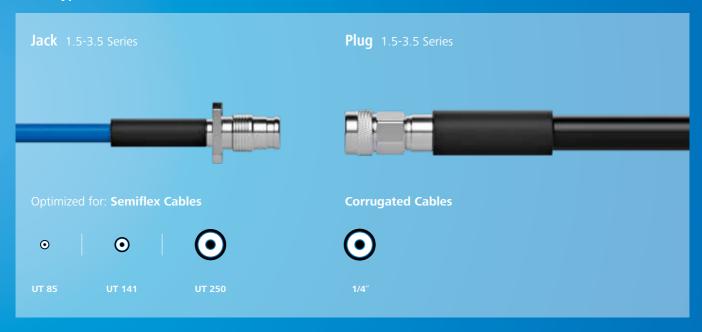
The 1.5-3.5 series enables a robust and PIM stable design in the smallest space. The space requirements for a typical 4 hole flange jack are only either  $15 \times 9.7$  mm or  $12.7 \times 12.7$  mm. Therefore the 1.5-3.5, based on the SMA form factor, requires around 47% less space than the 2.2-5 series and 75% less space than the 4.3-10 series.



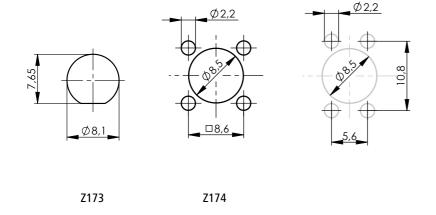
Hand in hand with the size and material reduction, there is also a cost and weight reduction, meaning this series is ideal for small cell applications. Despite the small size, low loss cables up to 1/4" can be used.

Screw and Push-Pull options with same jack

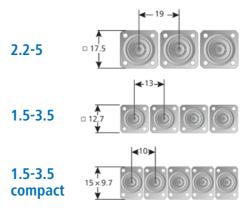
### **Cable Types**



# **Mounting Dimensions**



### 2.2-5 to 1.5-3.5



# The Best in Class.

# **Maximum Power in Every Size.**

Ever-increasing amounts of data have made further developments of global mobile networks essential. Above all, the development of 5G - the next generation of mobile communications is creating new and more diverse tasks for the mobile communications industry.

Telegärtner has developed the Cell IQ family to meet easily these challenges – today and in the future. This family comprised of three products: the field-proven 4.3-10 series standard, the compact and robust 2.2-5 series solution and the 1.5-3.5 series which already helps you take the next step into the future of connection technology. These products cover the complete spectrum of MCO requirements and deliver maximum power in any size.

# Special Solutions. Fast and Customized.

Our goal is to offer each of our customers the perfect solution. Based on our many years of experience with customer-specific solutions, we realize projects agilely and efficiently from consultation, to production and testing of development batches, to series production. And this starts from batch sizes of 1,000 pieces.



## **Development**



· Computer-aided engineering and RF simulation techniques realize your requirements. This allows us to efficiently and swiftly meet your technical specifications, thanks to short coordination channels and direct cooperation between all departments at a single location.

# **Prototyping**



• Telegärtner's in-house prototype manufacturing and own machine pool means prototypes can be built within 4 weeks.

### **Laboratory Tests**



• Fast prototype testing in our own laboratory.

### **Run Production**



- · Order fulfilment in batch sizes from 1,000 upwards thanks to manual and semi-automatic production.
- Consistently high quality through manufacturing in Germany.

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