

# OPUS, Short Modular Solution

*Outdoor Push-pull Universal Solution*

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# AGENDA

## Market Application Introduction

**OPUS Value Proposition**

**Product Details**

Overview

Main Features

Product Range

Performances

**OPUS Key Selling Points**

**Marketing Tools**



CUSTOMER  
INSIGHTS



## MARKET APPLICATION INTRODUCTION

“OPUS” was initiated to answer following customer expectations over existing designs

### NEEDS

- More **compact**
- All engineered plastic for **better corrosion resistance**
- Improved **modularity**
- Ownership **cost optimization**



*Outdoor connection*

## **MARKET APPLICATION**

Where OCTIS powers telecom outdoor nodes, OPUS extends Radiall reliability to **industrial, defense, & smart-city environments.**

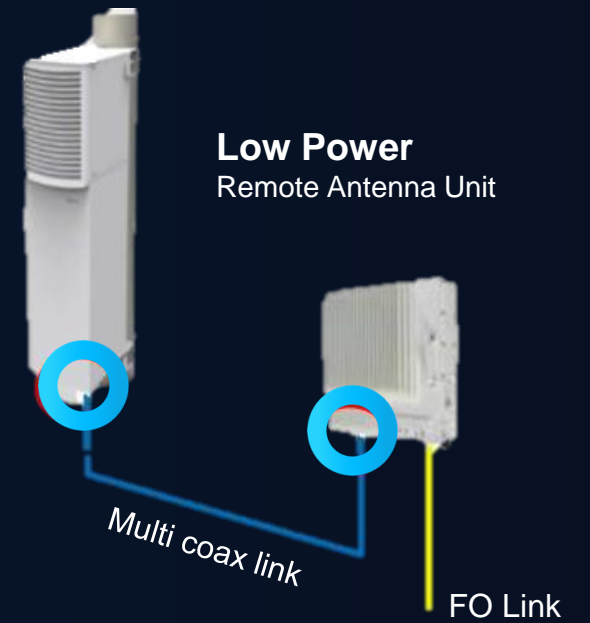


## MARKET APPLICATION SUCCESS STORY

Some DAS architectures may be organized with 2 types of ARUs that have different power. In this case, the **OPUS connector** is particularly suited to make the link between each ARU type



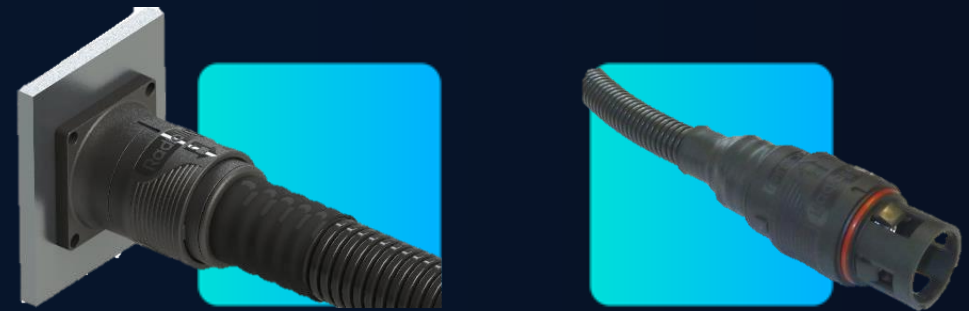
**OPUS connector**  
with 7 coax inside





## MARKET APPLICATION SUCCESS STORY


OPUS Short Plug Kit with plastic corrugated protective sleeve fitted at the rear extremity



⇒ **IP67 protection guaranteed along the cable**

# AGENDA

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## OPUS VALUE PROPOSITION vs OCTIS



OPUS delivers OCTIS-level **robustness** with simplified architecture for **faster integration**

OPUS brings **rugged outdoor reliability** into indoor or **hybrid environments** at lower system cost

OPUS offers **multi-interface adaptability** where OCTIS is application-specific



*OPUS achieves 80% of OCTIS's performance at 60% of the system cost  
OPUS reduces design-to-deployment time compared to OCTIS by up to 30% through modular configuration*

## OPUS v/s OCTIS



# OCTIS

- Field installable, kit
- Expensive
- Physical & Color coding
- Direct heat dissipation

- EMI shielding in all versions
- Many available interfaces
- Pitch between plugs: 26 mm



# OPUS

Field installable, kit	No heat dissipation
Cost effective	No EMI shielding
Require separate coding	Pitch between plugs: 35 mm

Bulky size compared to OCTIS

# PRODUCT DETAILS

## PRODUCT DETAILS

# OPUS

Outdoor Push-pull Universal Solution



High resistance to corrosion



Field installable

Waterproof IP65 - IP67 on selected cables



# PRODUCT DETAILS - OVERVIEW

## GENERIC Components

OPUS Push-Pull



Short plug  
body

Plug cap



Receptacle cap



Protective cap

## PRODUCT DETAILS - OVERVIEW

## DIRECT BOARD CONNECTION Components

Plug Kit mounted on outdoor  
field cable diameter 5 to 7mm  
*(and bigger if feasibility  
confirmed)*



From panel interface to end of gland



# MAIN FEATURES INFORMATION

## PRODUCT DETAILS – MAIN FEATURES

### Push-Pull Design

**Scoop Proof**  
Fiber protection

**Blind Mate**

**Small Form Factor**  
Very short connector  
35 mm pitch



**Outdoor Proof**  
720 H salt spray + SO2  
Waterproof IP677  
- 40 / + 85°C

**Push Pull**  
Easy & quick connection

**Tool Free**  
Field installable

**Rugged Design**  
100 mating cycles  
200 N tensile load

## PRODUCT DETAILS – MAIN FEATURES

### MODULAR Solution

Opus is compatible with any type of signal (*optical, ethernet RJ45, coaxial*) by changing only one component in the connector

Possible extensions to be developed: power, other ...



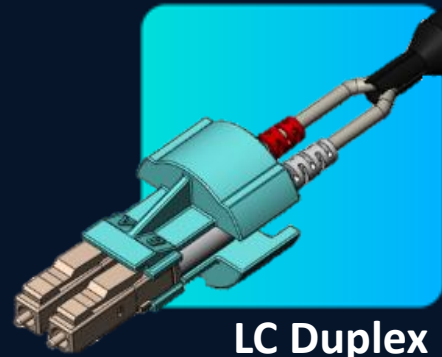
*Modularity*



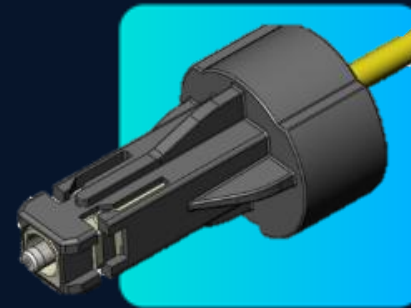
# PRODUCT DETAILS – MAIN FEATURES

## MODULAR Solution

Versatile concept  
with add-on inserts



LC Duplex



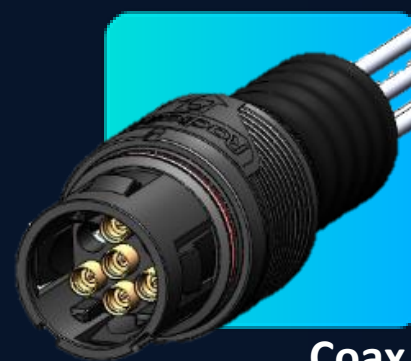
SC Simplex



RJ 45



Power



Coax

## PRODUCT DETAILS – MAIN FEATURES

### SHORT PLUG KIT Solution

OPUS Short Plug Kit is designed for indoor cables and connection to PCB Board.



LC Duplex

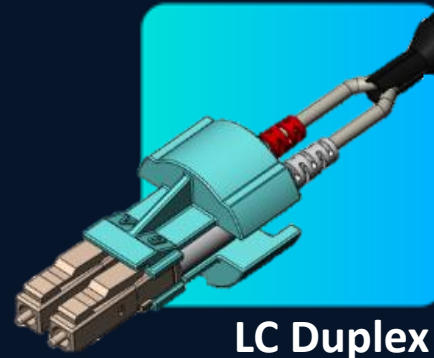


7 Coax SMP Com

## PRODUCT DETAILS – MAIN FEATURES

# SHORT PLUG KIT Solution

OPUS Short Plug Kit is designed for indoor cables and connection to adaptor receptacle



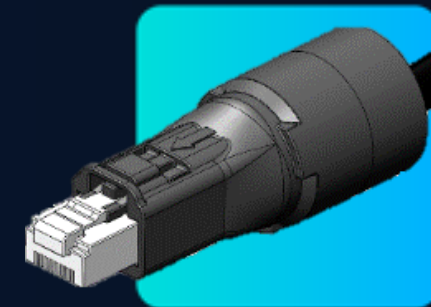
LC Duplex



SC Simplex



Power



RJ 45

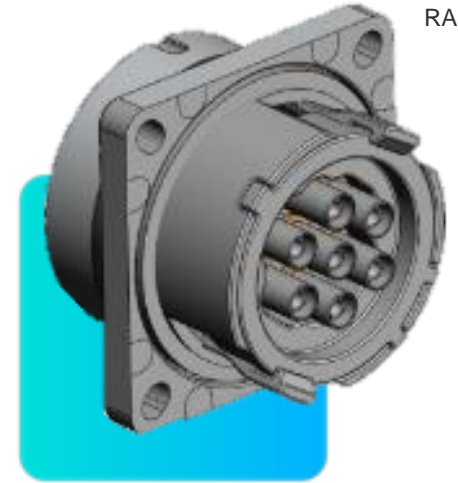
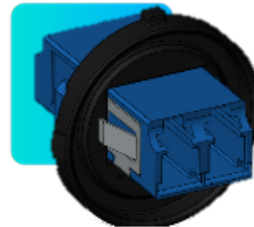
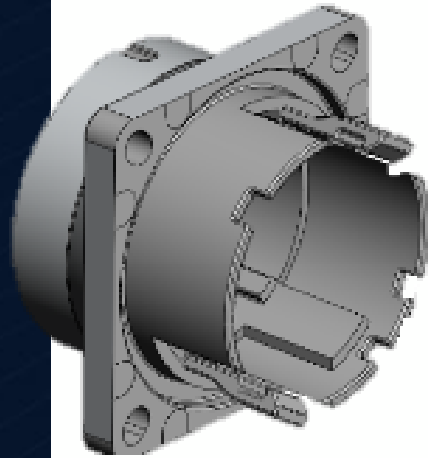


# PRODUCT RANGE INFORMATION

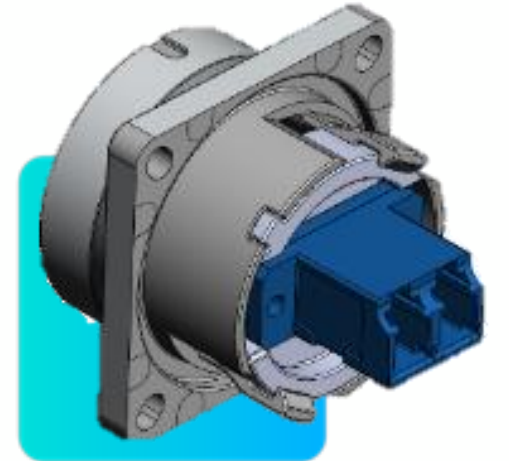
# PRODUCT RANGE

## CURRENT RANGE Available Components

Generic Receptacle versions  
with adaptor



**Multiway  
7 Coax SMP COM**

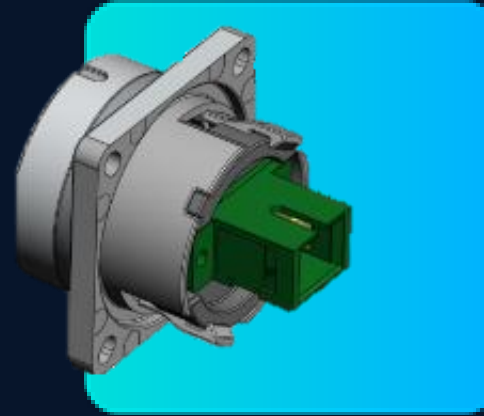
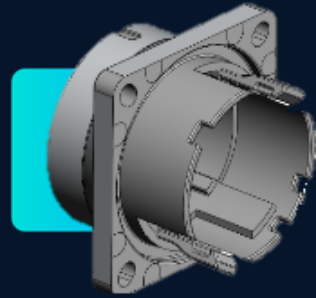


**LC Duplex**

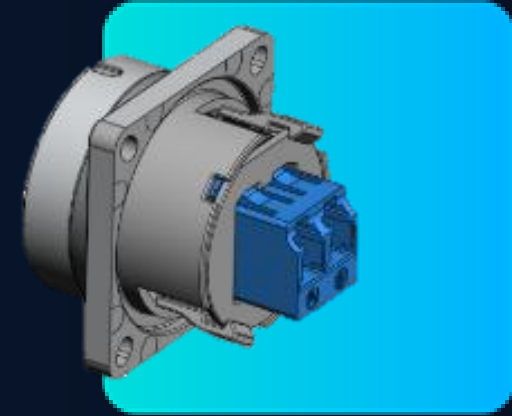
# PRODUCT RANGE

## RANGE EXTENTION Solution

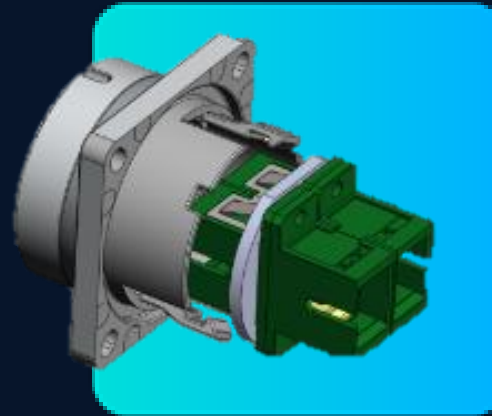
Possible  
Receptacle versions



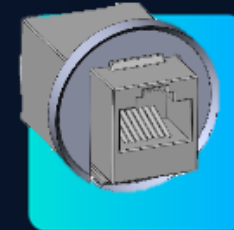
SC Simplex



LC Duplex



SC Duplex



RJ 45



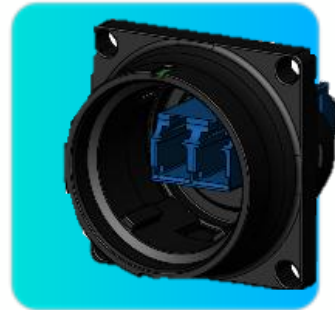
Power

## PRODUCT RANGE

## CURRENT RANGE

Available Components

OPUS Push-Pull



OPUS **LC duplex** to adaptor with indoor cable



OPUS **RF** up to 7 channels DC-12GHz with SMP-CO

## PRODUCT RANGE

## RANGE EXTENSION Solution

Following versions are not available but can be developed upon request.

For immediate needs, consult our OCTIS range.



RJ 45



SC/APC Simplex to GPON TRx



LC Duplex to SFP TRx



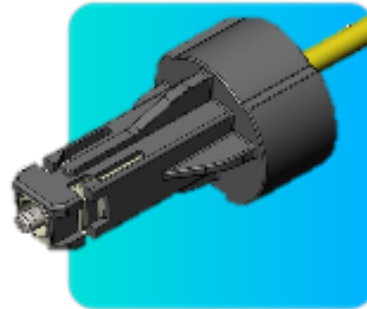
Coax + DC custom

# PRODUCT RANGE

## CURRENT RANGE Available Components

OPUS possible Plug Kit versions

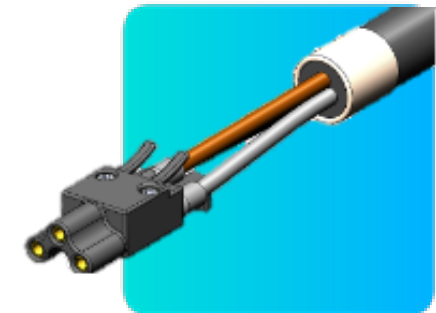
### Plug Kit Versions



SC Simplex



RJ 45



Power



**Total Modularity + (other)\***

(\*) : depending on potential volumes

## PRODUCT RANGE

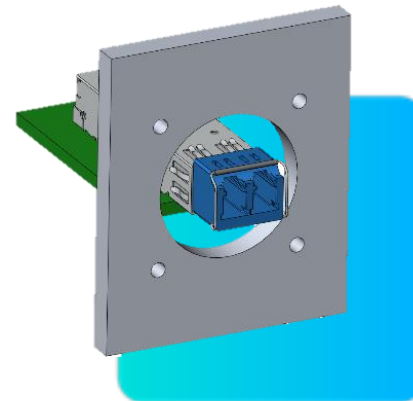
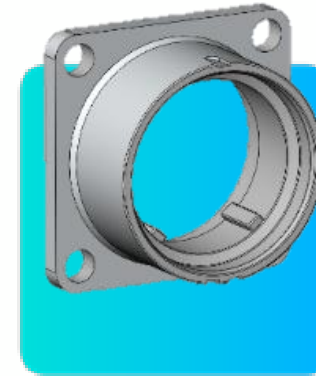
## CURRENT RANGE

Available Components

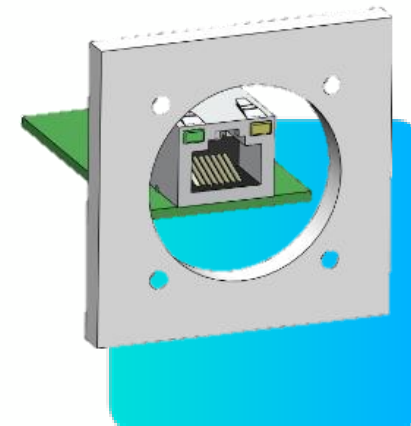
OPUS Direct Board Connection

### *Direct Board Connection*

*SFP transceiver or RJ45 receptacle on the PCB board*



SFP Transceiver



RJ45 Receptacle

## PRODUCT RANGE

## CURRENT RANGE

Available Components

OPUS Protective cap



Protective cap  
with cord on  
receptacle with  
adaptor



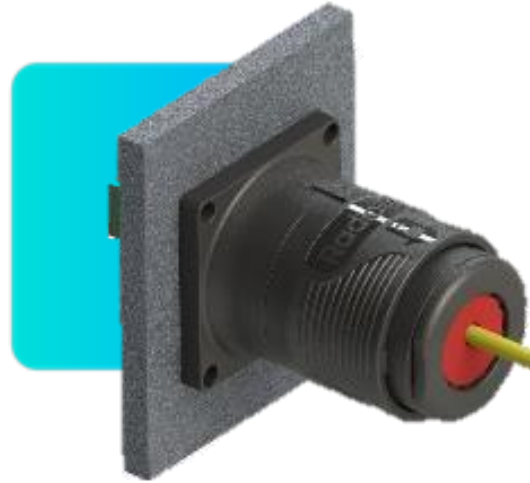
Protective cap  
with cord on  
receptacle to the  
PCB Board

## PRODUCT RANGE

## CURRENT RANGE

Available Components

OPUS Short Plug Kit



**OPUS**  
simplex cable  
connected on  
receptacle

*Plug Kit mounted on simplex  
cable with diameter 2 to 3mm*



**OPUS**  
duplex cable  
connected on  
receptacle

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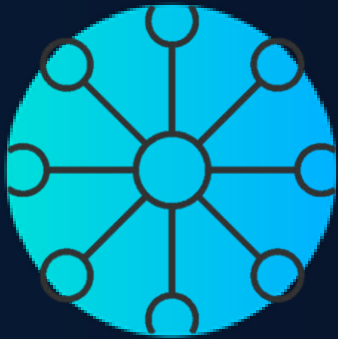
Product Range

Performances

 **OPUS Key Selling Points**

**Marketing Tools**

## OPUS KEY SELLING POINTS



### Versatile Connector

- Push Pull Easy & quick connection
- Blind mate
- Small form factor 35 mm pitch
- Scoop proof Fiber protection
- Tool free Field installable
- Rugged design
- Outdoor proof
- Easy to use & adapt



### High Performances

- Made of composite : high resistance to corrosion
- Waterproof IP65 - IP67 on selected cables
- Tensile strength up to 200N
- 100 mating cycles / -40 / +85°C
- Vibration according to IEC 61300
- Field installable



### Reliability

OPUS complements OCTIS

- Lighter, faster, and more flexible for cost-sensitive or volume applications.
- Up to 30% faster deployment than OCTIS

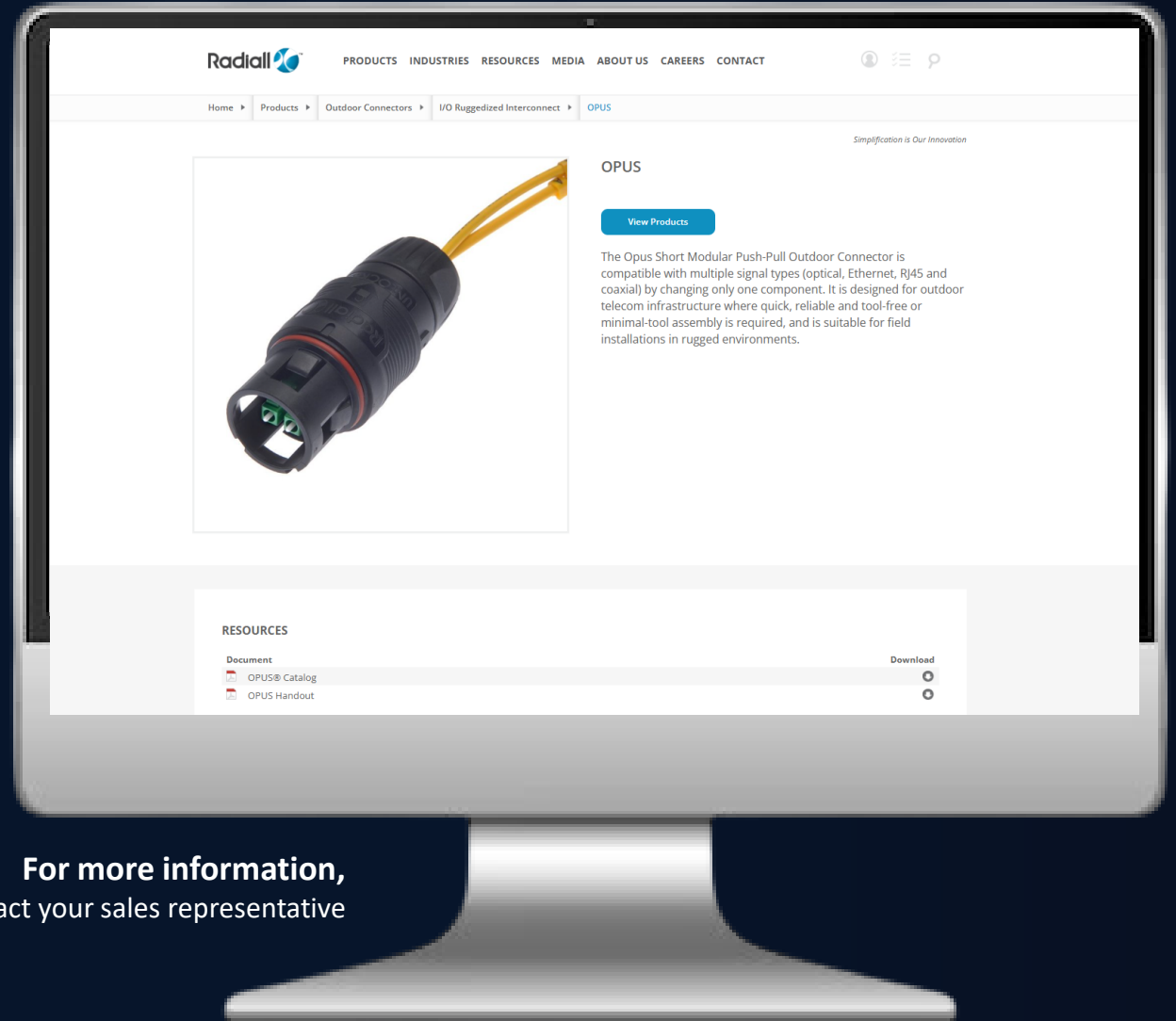
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# MARKETING TOOLS



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