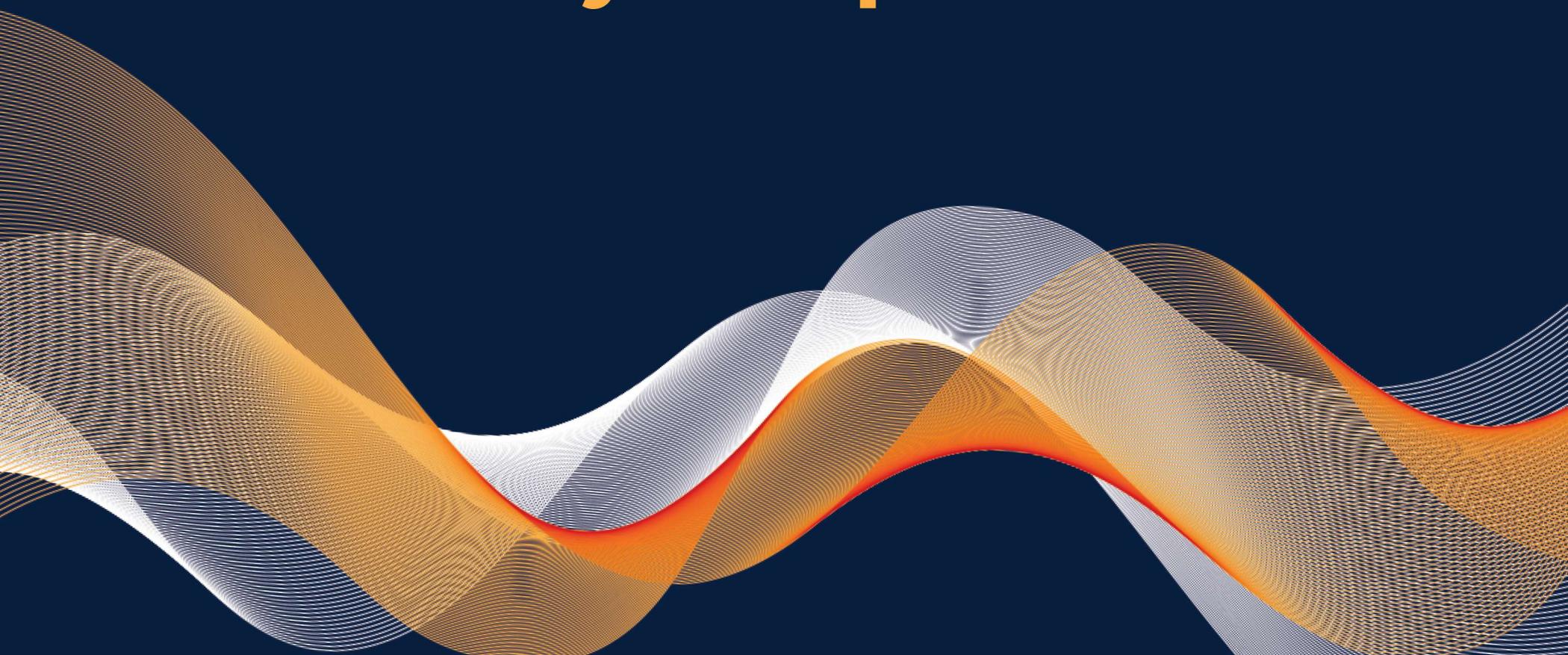




Dielectric[®]

History & Capabilities



Trusted for Decades. Ready for Tomorrow.

AGENDA

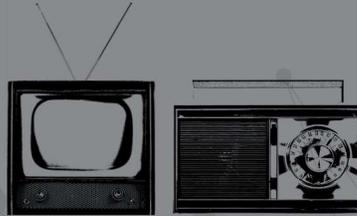
- HISTORY
- PORTFOLIO
- INDUSTRY LEADER
- SUPPLY CHAIN
- LEAN MANUFACTURING
- ENGINEERING EXPERTISE
- SYSTEMS DESIGN
- SINCLAIR
- QUESTIONS

Trusted for Decades. Ready for Tomorrow.

HISTORY

EARLY 1940's

- First commercial TV station goes on air in Chicago
- FCC authorizes commercial FM broadcast
- Dielectric founded by Dr. Charles "Doc" Brown



1949

Superturnstile VHF batwing antenna introduced



1965/1973

- First dual polarized FM antenna from single element
- Mount Sutro project completed



1986

Dielectric acquired RCA Antennas



2000

- Chicago triple stack antenna installed
- Dielectric acquires Harris Antenna Group



2006

Emmy received for ATSC broadcast transmission system RF Filter



2010

Powerlite™ TV & Radio products introduced



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HISTORY (CONTINUED)

2013

Dielectric partners with IF Telecom in Brazil



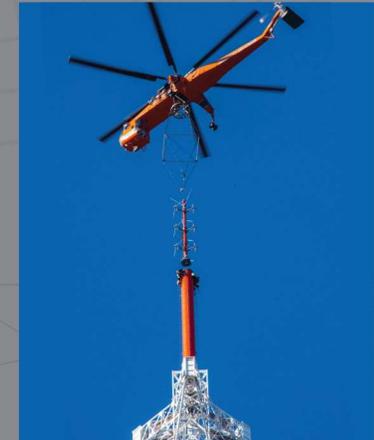
2016/2017

- Dielectric supplies antennas for National Network of Mexico
- Dielectric participates in multiple ATSC 3.0 trials
- Dielectric celebrates 75th Anniversary



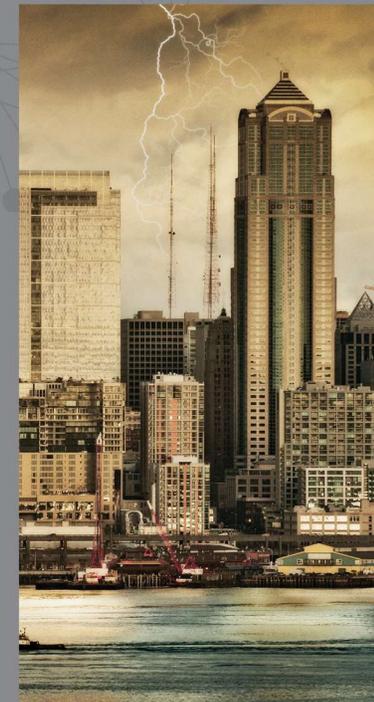
2018

Phase One of FCC Channel Repack Auction completed November 30. Dielectric leads industry with 700+ Repack antenna orders booked



2019

Dielectric partners with DAC System to introduce the first-ever real-time transmission line degradation & spark monitoring system RFHAWKEYE



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HISTORY (CONTINUED)

2023

Dielectric introduces new leading edge service:

- Drone Studies to verify antenna performance
- AI driven FM antenna pattern verification modeling
- Advanced RF system 24/7 real time monitoring



2024

Dielectric partners with SCMS for Radio Product Distribution



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DIELECTRIC & SINCLAIR

A unique combination providing an unequalled resource for building new networks:

- Sinclair: the largest Broadcast network in the U.S.
- Dielectric: the largest RF supplier in the U.S.

Both companies have a strong tradition of market innovation and engineering...with Sinclair's resources available to complement Dielectric's.

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COMPANY PORTFOLIO



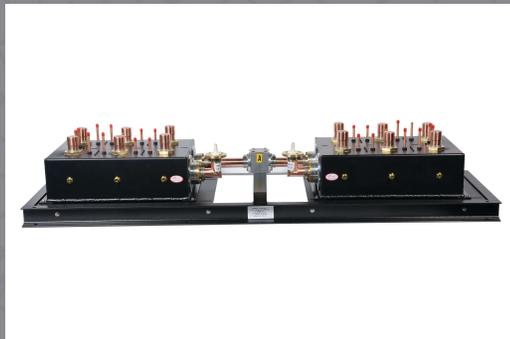
TV ANTENNAS



FM ANTENNAS



COMPONENTS



RF SYSTEMS

RFHAWKEYE 

WATCHES YOUR
TRANSMISSION LINE
SYSTEM LIKE A HAWK.

Even from afar, it hunts down performance issues and relays their exact locations to simplify troubleshooting. This preemptive approach allows maintenance to be done at the first sign of trouble, **avoiding more costly downtime and catastrophic failures.**

MONITORING
SERVICES



TRANSMISSION LINE

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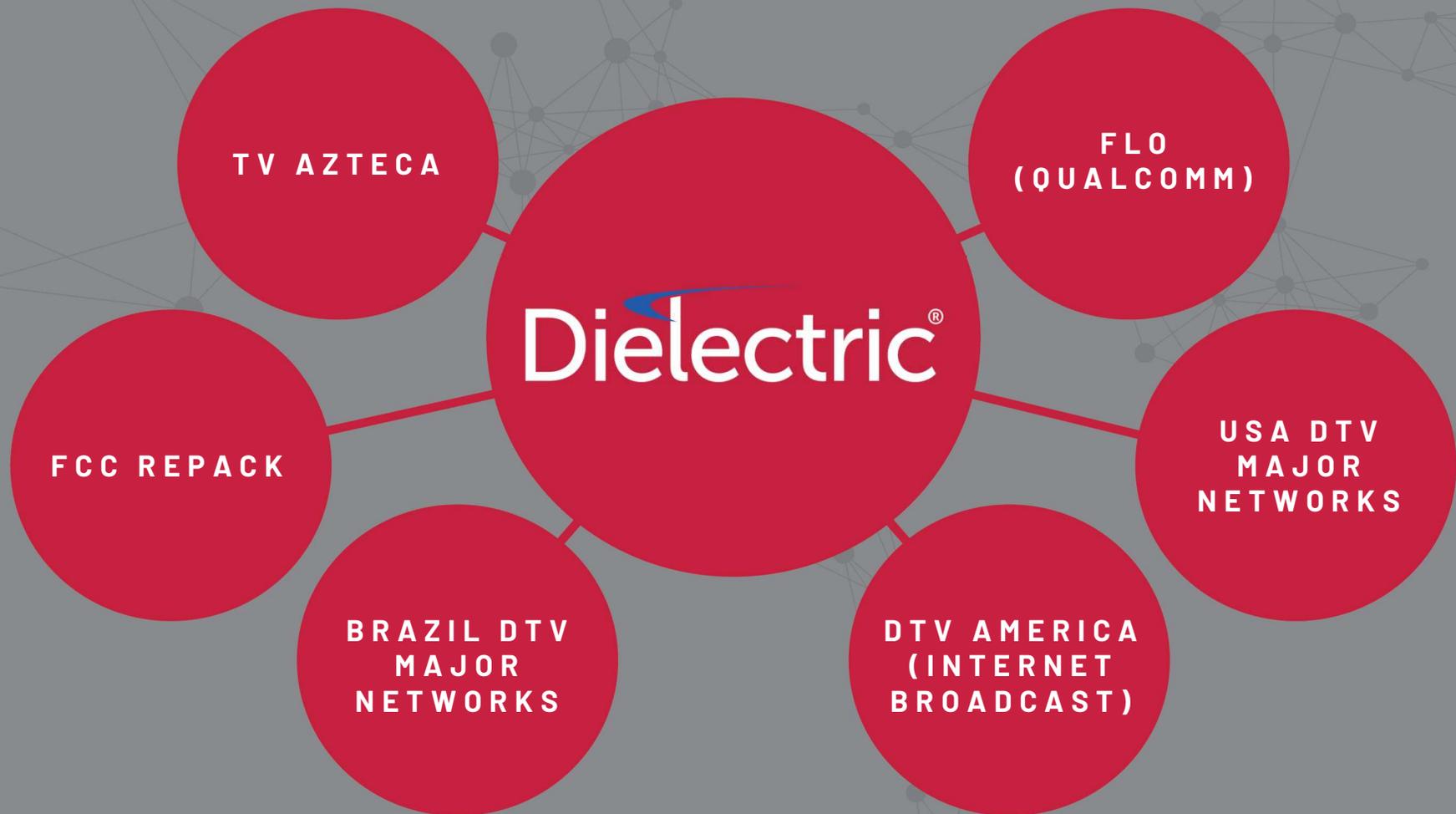
BUSINESS & ENGINEERING LEADER



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MAJOR ROLLOUTS

MANY MAJOR BROADCASTERS HAVE RELIED ON DIELECTRIC FOR THEIR NETWORKS.



Trusted for Decades. Ready for Tomorrow.

MAJOR ROLLOUTS: FLO, DTV & REPACK

OVER 2,400 SYSTEMS BUILT IN 12 YEARS.



Trusted for Decades. Ready for Tomorrow.

SUPPLY CHAIN

RAW MATERIALS



- Highest quality providers for copper, PTFE, etc.
- Kanbans to ensure availability

SUPPLIERS



- Hundreds of Suppliers worldwide, and depth of local providers
- Suppliers are pre-qualified and regular suppliers are evaluated annually

FACTORY



- Raymond, ME, facility produces RF products, TV & Radio antennas, transmission lines & components.
- Plus antenna ranges and R&D

SHIPPING



- Dedicated on-site shipping department
- Long-term arrangements with carriers

Trusted for Decades. Ready for Tomorrow.

LEAN MANUFACTURING

- Dielectric employees have been formally trained on Lean Manufacturing Principles
- Manufacturing floor has been designed around Lean Flow
- 5 Sigma quality throughout manufacturing, engineering, and administration

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INNOVATION & INVESTMENT IN TECHNOLOGY

A CULTURE OF INNOVATION SPANNING EIGHT DECADES.

- Over 200 RF Patents
- Two Emmys for Technical Innovation
- More than 12,000 TV & FM antennas installed
- Six National Association of Broadcasters (NAB) Pick Hits
- Two Society of Broadcast Engineers (SBE) Awards



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DESIGNING WITH RELIABILITY

RELIABILITY IS PROPORTIONAL TO PARTS COUNT.

THE DEFINITION OF
FAILURE RATE IS
(MIL-217 STANDARD)

$$\lambda = \sum_{i=1}^n N_i \lambda_i \pi_{oi}$$

n = # of part categories
 N_i = Quantity of i^{th} part
 λ_i = Failure rate of i^{th} part
 π_{oi} = Quality factor of i^{th} part

Product failure rate is simply the summation of
the base failure rates of each component.

OUR GOAL IS TO
DESIGN FOR THE
HIGHEST
PERFORMANCE
WITH THE MINIMUM
NUMBER OF PARTS

KEEP IT SIMPLE

FEW
CONNECTIONS
—
HIGHLY
ENGINEERED
DESIGNS
—
EASE OF
INSTALLATION

Trusted for Decades. Ready for Tomorrow.

SINCLAIR COMPANY OVERVIEW

DIELECTRIC IS BACKED BY THE LARGEST BROADCASTER IN THE U.S.

- 1971: Sinclair founded by Julian Sinclair Smith—WBFF initial station.
- 1980's-'90s: Sinclair grows through strategic acquisitions, and goes public in 1995.
- 2013: Sinclair purchases Dielectric.
- 2014: Sinclair becomes the largest US TV station owner. The current count is 162 stations in 79 markets.
- 2019: Sinclair and ONE Media are in the vanguard of ATSC 3.0 and other cutting-edge technology.
- Sinclair has selected Dielectric Antennas and RF Systems throughout its 40+ year history.



Trusted for Decades. Ready for Tomorrow.

CONCLUSION

DIELECTRIC HAS WHAT YOU NEED!

ENGINEERING EXPERTISE

INDUSTRY-BEST TERMS
& CONDITIONS

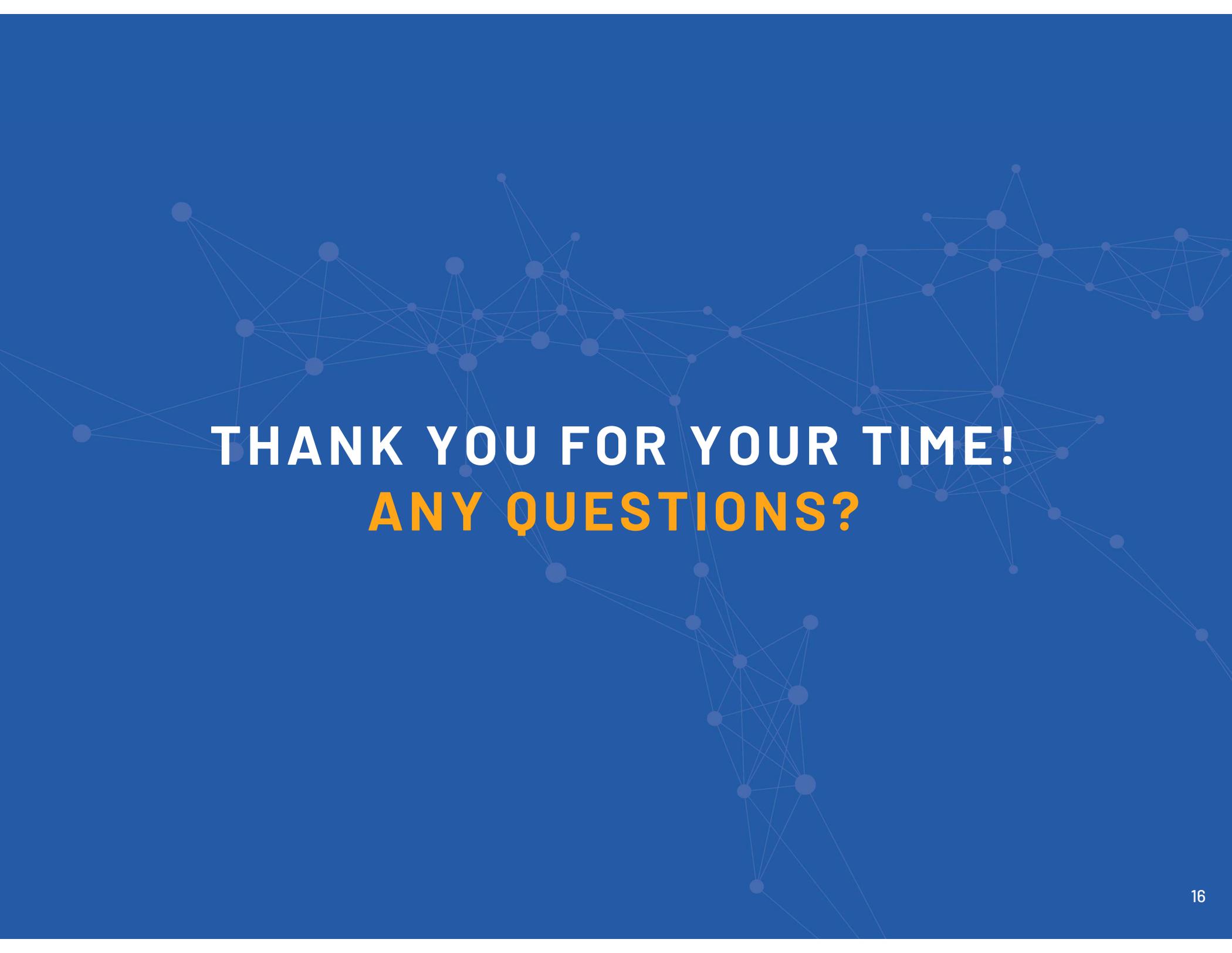
EXTENSIVE PRODUCT PORTFOLIO

STRONG FINANCIAL STABILITY

Dielectric[®]

**YOUR RF SUPPLIER
OF CHOICE**

Trusted for Decades. Ready for Tomorrow.



THANK YOU FOR YOUR TIME!
ANY QUESTIONS?



Dielectric[®]

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Dielectric.com

Raymond & Lewiston, Maine

(800) 341-9678

