

The logo for Meinberg, featuring the word "MEINBERG" in a stylized, italicized, blue font with a white outline, set against a dark blue background with a geometric, stepped pattern.

The Synchronization Experts.

**Universal
Synchronization
Solutions.**

Since 1979.

Meinberg Company Presentation

**Allan Armstrong
CEO, Meinberg USA Inc.**





Introducing

**MEINBERG**

The Synchronization Experts.

Founded in 1979

- HQ in Bad Pyrmont, Northern Germany
- Entirely Focused on Synchronization
- Global NTP & PTP Technology Leader
- Consistent Track Record of Growth



The Synchronization Experts.

Global Leadership

Meinberg products
synchronize a lot of
critical infrastructure
on this planet

- Mobile
- Datacenter
- Defense
- Air Traffic Control



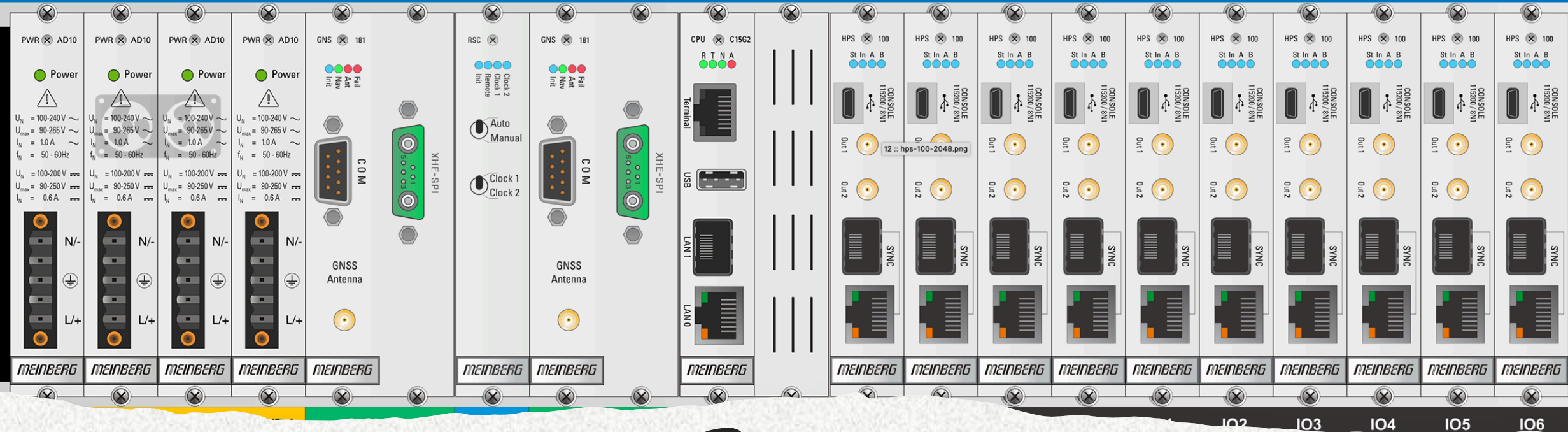


MEINBERG

Industry-Specific
Synchronization Solutions



FINANCE



Standards

- MiFID II & MiFIR
- FINRA
- CAT NSM
- SEC Rule 613
- ESMA

Capacity & Density = Scalability

MB000: 3U chassis

- Up to 20,480 unicast clients
 - Up to 2,621,440 delay requests/s
- 3x more than closest competitor

MEINBERG BROADCAST

- Blackburst (PAL/NTSC) with VITC
- Tri-Level Sync
- DARS
- LTC
- AES Genlock/Word Clock

SDI ➔ IP

- SMPTE ST 2022
- SMPTE ST 2110
- SMPTE ST 2059
- AES67

Remote Sports & News Collection
Outside Broadcast Van



microSync

Studio
Production



M1000

Distribution & Streaming
Infrastructure



M3000

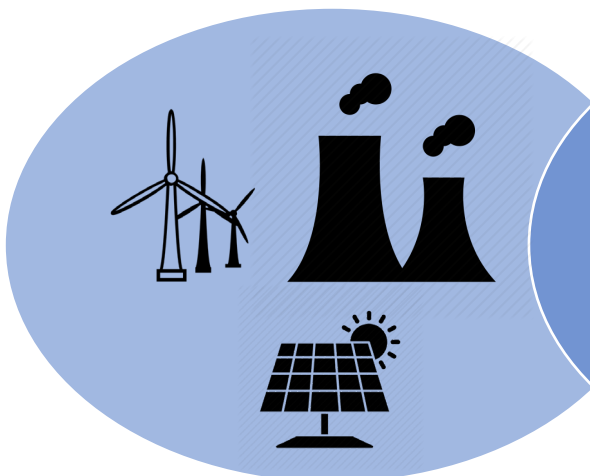
MEINBERG

POWER GRID

- Frequency Deviation Monitoring
- Substation Automation
- SCADA System: IEDs, MUs, PMUs
- Synchrophasor Measurements
- Travelling-wave Fault Detection
- Anti-Jamming & Anti-Spoofing

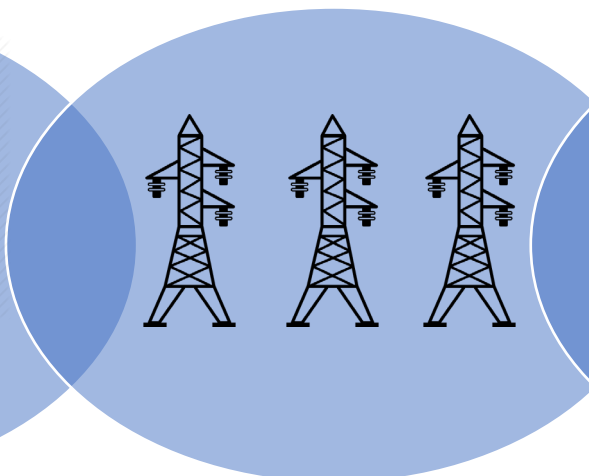
- Digital Substation Evolution
IRIG → NTP → PTP
- IEEE 1588 PTP v2
- IEEE C.37.238
- IEC/IEEE 61850-9-3
- IEC 62439-3 HSR/PRP

Generation



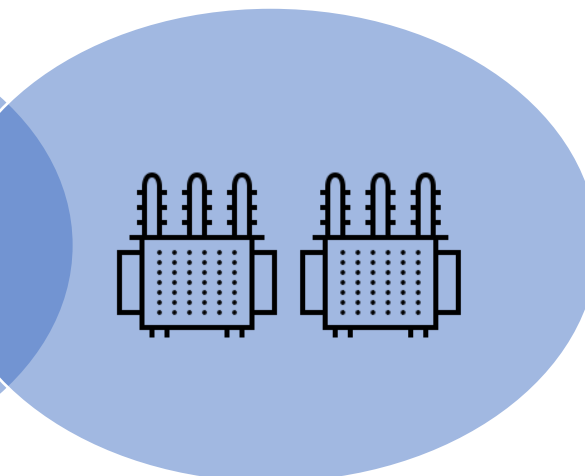
M3000

Transmission



M1000

Distribution



M500



microSync

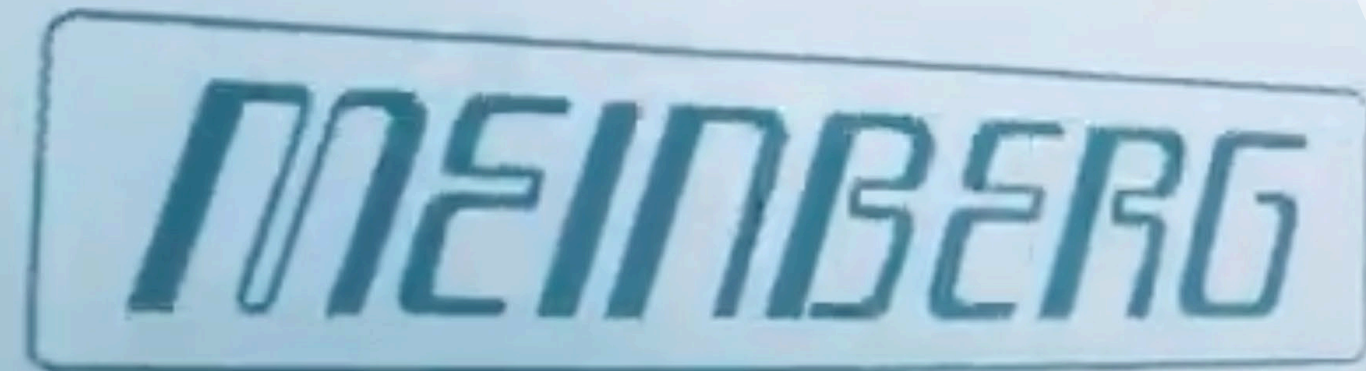


Displays, Slave Clocks,
& Signal Distribution

Wholly-Owned Factory

Advantages

1. **R&D-Manufacturing Collaboration** – cycle time, responsiveness
2. **Control of our Supply Chain** – assurance of supply – lead times
3. **Security** – we control BoM

The image shows a large, light-colored sign for the company Meinberg. The sign features the company name 'MEINBERG' in a bold, stylized, italicized sans-serif font. The letters are dark blue or black. The sign is mounted on a light-colored wall or structure. In the background, there is a modern building with large glass windows and a glass entrance canopy. The overall scene is outdoors, with some foliage visible in the top left corner.

MEINBERG

Meinberg Funkuhren GmbH & Co. KG

The logo for Meinberg, featuring the word "MEINBERG" in a stylized, italicized blue font with a white outline, set against a white rectangular background.

MEINBERG

**Entirely Focused on
Synchronization**

Since 1979

**Meinberg HQ
Bad Pyrmont,
Germany
Est. 1979**



**Oregano Systems,
a Meinberg Company
Vienna,
Austria
Est. 2001**



**Meinberg USA
Santa Rosa, CA,
USA
Est. 2020**

