HEAD TO HEAD COMPARISON

Evaluating the features that matter most

	CYPHER®	OTHER COMPARABLE SYSTEMS*
Screen Size *Reduce mistakes outdoors with the large, high visibility display.*	**307mm diagonal (12.1 in.)**	269mm diagonal (10.6 in.)
Touchscreen *No need to remove your gloves, and no worries about screen damage with our durable multi- touch display.*	**Capacitive**	Resistive
Operating Temperature *Stay productive to fewer shutdowns thanks to Cypher's ability to stay cool in icy conditions and blistering heat.*	**-10°C to 50°C (14°F to 122°F)**	-10°C to 45°C (14°F to 113°F)
Encoder *Easily manage complex scanners and automated workflows for faster, more reliable inspections.*	**3-axis support**	2-axis support
Maximum Recharging Temperature *Minimize downtime with safe recharging in hot environments-no cooling delays.*	**40°C (104°F)**	30°C (86°F)
USB Ports *Be more flexible in the field with more options to connect peripherals and manage data.*	**4x USB 3.1**	2x USB 3.1
Data Storage *Keep working without interruption — store more jobs and skip the mid-shift offload.*	**2 TB SSD**	1 TB SSD, for most
Focal Laws *Cypher supports advanced multi-group configurations for faster, more accurate results.*	**4096 maximum total**	1024 maximum total
Max PRF *Cypher supports advanced multi-group configurations for faster, more accurate results.*	**Up to 40 kHz**	Up to 20kHz
A Scan Points *More accurate results with higher resolution, precise flaw sizing, and clearer signal analysis.*	**Up to 65536 pts**	Up to 16384 pts
UT/PA Filters *Gain clearer signals and more precise flaw detection across multiple applications.*	**Fully adjustable high- low- & band-pass**	Fixed high- low- & band-pass
Groups *More data per pass means faster inspections and more accurate results.*	**Up to 8 simultaneous**	Limited
Multi-Techniques *Save time and ensure compliance — Cypher delivers imaging and code compliance in a single scan.*	**Multi-Groups TFM + TOFD capability**	FMC or PWI only
Performance *No longer just for complex jobs — Cypher makes TFM practical for daily work.*	**Fastest on the market (up to 4× faster in benchmarks)**	Limited

**Data and specifications compiled from commercially available UT instruments are provided solely for reference and comparison with official Cypher data from Eddyfi Technologies.*

Cypher's design is intelligent, intentional, and built for precision in the field. Every detail is designed to make inspection more intuitive, more portable, and more powerful.



BUILT FOR THE FIELD

- Worry-free use in rain, dust, or any other conditions.
- Prevents unexpected failures to keep inspections running in any environment.
- Fewer repairs and replacements mean less downtime, lower costs, and higher lifetime value.

- Cuts file management hassle—no mid-job transfers, just focus on the inspection.
- One less device to carry or lose, simplifying logistics in remote or offshore sites.

- No large splitter necessary —just scan, switch, and keep moving. Faster setup for high-throughput inspections.
- Cleaner, more accurate data with reduced noise and cross-talk; each channel fully isolated and shielded.

- Reliable from arctic pipelines to desert solar farms—no waiting on weather.
- Prevents thermal shutdowns and data loss by reducing overheating risk.
- Standardized deployment across sites worldwide, from Alberta winters to Middle East summers.

PERFORMANCE WITHOUT COMPROMISE

- Even the smallest indications stand out—clearer images, clearer decisions.
- Boosts Probability of Detection (POD) while minimizing false calls - less time spent reviewing questionable data or rescanning.

- Dramatically boosts throughput—inspect more welds, parts, or assets per shift without compromise.
- Cuts technician time on site reduces rental costs, and helps service providers protect margins.
- Makes TFM practical for everyday welds, corrosion, and general inspections.

- Inspect from multiple angles or depths in one pass for a complete picture and fewer rescans.
- Cross-validate findings in real time—ideal for nuclear, aerospace, and power-gen procedures.

- Keep familiar workflows and tools—just with upgraded hardware.
- Delivers comprehensive for critical flaw analysis while keeping the interface simple for all skill levels.

EFFORTLESS WORKFLOW

- Cuts training time—new inspectors perform advanced inspections confidently from Day 1.
- Experts get full control; beginners stay focused with simplified views.
- Junior inspectors work more independently, freeing Level 3 resources and boosting team efficiency.

- Visualize defects in vivid detail—even in direct sunlight—for faster, more confident decisions.
- Operate effortlessly in the field—no fumbling, no stylus, no frustration, even in tough conditions.

- Secure, real-time file backup—accessible anywhere, even before the inspector leaves the site.
- Instant support and second opinions without exporting data or scheduling meetings.
- No USBs, shared drives, or lost files—just scan → save → sync to your central system.

- System Performance Verification (SPV) enables inspection confidence between calibrations without removing from the field.
- Reduces human error and improves consistency—critical for quality across teams and shifts.
- Rookies can set up encoded scans confidently, while experts save time.
- One-screen control slashes prep time—no extra remotes, software, or laptops needed.

CYPHER®

Cypher is the next-generation phased array system that combines rugged, reliable hardware with intuitive software to deliver faster, more accurate inspections in any environment — helping your team maximize uptime and make confident decisions with ease.



Where Cypher Works

INDUSTRY	KEY MARKETS
OIL & GAS	Pipeline girth welds
POWER GENERATION	Refinery corrosion mapping (CUI)
AEROSPACE	Small bore piping / boiler tubes
DEFENSE	Pressure vessel welds / nozzles
MINING	Riser & field repairs
	Austenitic DM welds
	Turbine / rotor welds

What Cypher Delivers

Faster Startups, More Jobs Completed

Cypher's streamlined setup means technicians are scanning within minutes, not half an hour.

→ **More welds inspected per shift, fewer overtime costs.**

Clarity That Drives Confidence

With reduced noise and high-resolution imaging, even the smallest defects stand out.

→ **More accurate decisions, fewer rescans, and greater safety assurance.**

Empowering Every Technician

Beginners get simplified views, while experts keep advanced controls.

→ **Less time training, fewer bottlenecks, and more efficient teams.**

Reliable in Any Environment

From Arctic pipelines to desert solar farms, Cypher is built to perform.

→ Inspections keep moving no matter the weather or location.

Eddyfi Technologies