

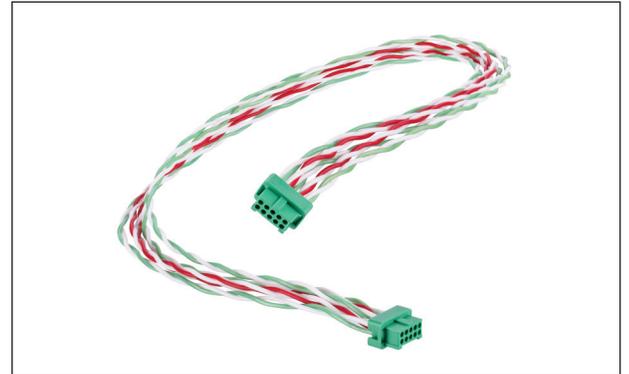
High-Reliability Twisted and Shielded Cable Assemblies

Ready-made and fully inspected for demanding applications

Twisted Pair Cable Assemblies

Combat crosstalk issues in your cable assembly with twisted pair (TP) connectivity. By adding TP into the assembly, electromagnetic radiation from wire pairs is reduced. Each pair is also exposed to EMI sources evenly, allowing signal noise to be identified as a common-mode signal and cancelled out at the receiving end. Originally used for land-based telecommunications, TP assemblies are becoming standard practice across different industries.

Two different twist pitches are alternated across the connector – 2 twists per inch (red & white) and 3 twists per inch (green & white). Twisted cables do not unwind, so both single and double-ended cable assemblies are possible. Available in 26 and 28AWG wire sizes, to MIL 16878/6 cable with PTFE insulation.



Twisted pair cable assembly on Gecko Latch

Shielded Cable Assemblies

Cable assemblies can be prone to outside interference or can also act as antennas, causing interference in other systems. Shielded assemblies prevent interference by fully covering the cables in metal braid. Both ends of the braid are terminated on metal backshells for complete covering.

Choose cable assemblies with both twisted and shielded wiring for maximum EMI defense. Cable lengths from 60mm to 10 meters made to order, with short lead-times and help from our Experts.



Close-up showing alternating twist pitches

| Features and Benefits | |
|---|---|
| 26AWG and 28AWG twisted cable sizes | Available on all Gecko and Datamate signal connections |
| Shielding compatible with all metal backshell sizes | Available on Gecko-SL and Gecko-MT, Datamate J-Tek and Datamate Mix-Tek |
| Fully inspected and continuity tested | Cables are ready for use on delivery |
| Manufactured by trained staff to IPC-A-620 | Eliminate continued investment in training and tooling |

| Key Applications | |
|--------------------------------|---|
| Aviation | Avionic controls, guidance systems, engine controls, radar and tracking |
| Motorsport & Electric Vehicles | Navigation, AI, GPS and tracking equipment, communications and telemetry, ERS controls |
| Space | Satellites & CubeSats, radar, communications, launch systems |
| Defense & Security | UAVs, UUV and other ROV, ground communications, handheld portable equipment, rugged vehicle electronics |



Shielded cable assembly on Gecko-SL



Harwin Europe (Global Headquarters)

Portsmouth, Hampshire, UK

E: mis@harwin.co.uk

T: +44 (0)23 9231 4545

Harwin Inc (Americas)

New Albany, Indiana, USA

E: mis@harwin.com

T: +1 603 893 5376

Harwin Asia Pte Ltd (Asia, Australasia)

Singapore

E: mis@harwinasia.com

T: +65 6 779 4909