3M Industrial Camera Cable Assemblies
Expanding the possibilities in machine vision connections.

3M brings decades of expertise in signal transmission and electrical and mechanical cable design technology to factory automation. In USB3 Vision®, the well-established Camera Link standard and the exciting possibilities of the CoaXPress® interface, we are dedicated to improving performance, robustness and reliability of machine vision systems – often at lower total system cost.

3M™ USB3 Vision Industrial Camera Cable Assemblies

With our selection of USB3 Vision compatible cable assemblies, 3M brings new capabilities – far beyond standard requirements for USB3 Vision cable solutions (>10 meters), and bending durability >100 million cycles – to the USB3 Vision standard.

3M™ USB3 Vision Industrial Camera Cable Assembly, 1U30G Series
- Combines long-distance connection and excellent repeated bending durability
- Functional cable length > 7 meters
- Sliding bendability > 100 million cycles
- Features USB Type A and USB Micro B connectors, ideal for connecting cameras to control units
- Locking screws are available on both ends for added stability
- Connectors are available in straight, upward, downward, left-hand, and right-hand configurations for space savings and design flexibility

3M™ USB3 Vision Industrial Camera Cable Assembly, 1U30E Series
- Excellent for long-distance camera connections in non-repetitive motion applications
- Functional cable length up to and beyond 10 meters, far beyond standard requirements for USB3 Vision cable solutions
- Low resistance along transmission path helps maintain voltage along entire cable connection
- Features USB Type A and USB Micro B connectors, ideal for connecting cameras to control units

3M™ USB3 Vision Industrial Camera Cable Assembly, 1U30A Series
- Functional cable length > 7 meters
- Features USB Type A and USB Micro B connectors
- Excellent for non-repetitive motion applications

3M™ USB3 Vision Industrial Camera Cable Assembly 1U30S Series
- Features USB Type A and USB Micro B connectors, ideal for connecting cameras to control units
- Durable cable holds up after 10 million U-shaped cycles
- Functional cable length up to and beyond 5 meters

3M™ Camera Link Industrial Camera Cable Assemblies

As one of the originators of Camera Link standard, 3M provides total interconnect solutions for Camera Link industrial camera systems. 3M offers a wide variety of MDR and SDR connectors as well as Camera Link and PoCL cables to meet nearly any electrical and mechanical requirement.

3M™ Camera Link Industrial Camera Cable Assembly, MDR, 14×26 Series
● Ideal for connecting machine vision cameras to frame grabber boards
● Camera side MDR connector is available in straight, upward and downward versions for space savings and design flexibility
● Frame grabber side features a Starlight MDR connector
● Available in base, medium and full configurations, PoCL/non-PoCL, and versions for non-motion and motion applications
● Thumbscrews provide rugged retention even in applications requiring repetitive motion

3M™ Camera Link Industrial Camera Cable Assembly, MDR, 1WL26 Series
● Excellent for use with 1M x 26-x5xx or 14 × 26 cables to extend Camera Link connections
● Features MDR 26-position receptacle connector on one end MDR 26-position plug connector on the other
● Available in base medium and full configurations, non-motion and motion applications
● Receptable connector features EMI shielded junction shell
● Thumbscrews provide rugged retention even in applications requiring repetitive motion

3M™ Camera Link Industrial Camera Cable Assembly, MDR/SDR, 1Mx26-x5xx Series
● Ideal for connecting machine vision cameras to frame grabber boards
● Available in base-medium and full configurations, PoCL/non-PoCL, and versions for non-motion and motion applications
● Camera side MDR plug connector is available in straight, upward and downward versions
● Camera side SDR plug connector is available in straight, upward, downward, left-hand and right-hand configurations for space savings and design flexibility

3M™ Camera Link Industrial Camera Cable Assembly, MDR/SDR, 1Mx26-xFxx Series
● Excellent for use with 1M x 26-x5xx or 14 × 26 cables to extend Camera Link system applications
● It features MDR 26-position receptacle connector with EMI shielded junction shell on one end and SDR 26-position plug connector on the other
● Available in base-medium and full configurations, non-motion and motion applications
● Thumbscrews provide rugged retention even in applications requiring repetitive motion

3M™ Camera Link Industrial Camera Cable Assembly, SDR, 1Sx26-x1xx Series
● Ideal for connecting machine vision cameras to frame grabber boards
● Available in base-medium and full configurations, PoCL/non-PoCL, non-motion and motion applications
● Camera side SDR connector is available in straight, upward and downward versions
● Frame grabber side features Starlight SDR connector
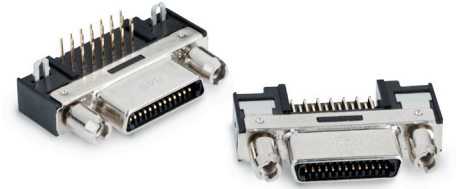● Thumbscrews provide rugged retention even in applications requiring repetitive motion

3M™ MDR/SDR Boardmount Connectors

Our selection of .050", 1.27 mm pitch MDR and .80 mm SDR boardmount connectors is available on all 3M™ Industrial Camera Cable Assemblies. These shielded MDR and SDR connectors feature 26-position connectivity and wiper-on-wiper contact for reliable repetitive plugging.

3M™ MDR/SDR Industrial Camera Boardmount Connectors

Our selection of .050", 1.27 mm pitch MDR and .80 mm SDR boardmount connectors is available on all 3M™ Industrial Camera Cable Assemblies. These shielded MDR and SDR connectors feature 26-position connectivity.

- Includes surface mount, through-hole, vertical and right-angle versions
- Wiper-on-wiper contact allows for reliable repetitive plugging
- Die cast or molded metal cases add rugged durability
- Screw or ground locks, on-board jack sockets make for reliable PCB retention
- PCT insulator material is available for surface-mount applications
- Available interface latch design helps increase connection stability
- Includes version for ultra-low signal skew, high data rate transmission

3M™ CoaXPress Industrial Camera Cable Assemblies

3M provides CXP-12 and CXP-6 CoaXPress2.0 compatible cable assemblies to help incorporate and maximize the latest in high-speed, high-resolution machine vision camera systems.

3M™ CoaXPress Industrial Camera Cable Assembly, 1CXx-xx-0S Series

- Ideal for applications requiring excellent cable flexibility and easy handling
- Repeated bending durability >10 million cycles
- Functional cable length from 9 m -13 m
- High-speed data transfer of up to 12.5 Gbps per channel (CXP-12, Micro-BNC, BNC connector specifications)
- Available with DIN1.0/2.3 (for CXP-6, up to 6.25 Gbps/channel)

3M™ CoaXPress Industrial Camera Cable Assembly, 1CXx-xx-0G Series

- Ideal for applications requiring repetitive motion and long transmission distance
- Outstanding repeated bending durability > 30 million cycles
- Functional cable length from 10 m - 14 m
- High-speed data transfer of up to 12.5 Gbps per channel (CXP-12, Micro-BNC, BNC connector specifications)
- Available with DIN1.0/2.3 (for CXP-6, up to 6.25 Gbps/channel)